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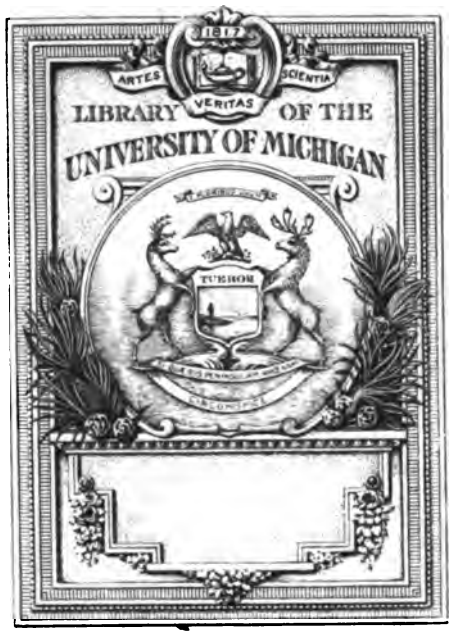
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# STATE OF MICHIGAN,

Legislature

FOR THE YEAR 1881.

IN THREE VOLUMES.

## VOL III.

BY AUTHORITY.

LANSING, MICH.:
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TENTH ANNUAL REPORT

OF THE

# COMMISSIONER OF RAILROADS

OF THE

# STATE OF MICHIGAN,

FOR THE

YEAR ENDING DECEMBER 31, 1881.

BY AUTHORITY.

LANSING:
W. S. GEORGE & CO., STATE PRINTERS AND BINDERS.
1882.

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MADE TO THE COMMISSIONER OF RAILROADS FOR THE YEAR 1881.

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# REPORT.

STATE OF MICHIGAN,
OFFICE OF THE COMMISSIONER OF RAILROADS,
*Lansing, November 30, 1882.*

HON. DAVID H. JEROME, *Governor of the State of Michigan:*

SIR,—I have the honor to transmit to you the Tenth Annual Report of the Commissioner of Railroads, as required by the provisions of the law organizing his office and defining the powers and duties connected therewith. It is compiled from the annual returns made by the railroad companies doing business in this State for the year ending December 31, 1881, which are also appended in full to form a part of the report, and it is believed furnish a very full and satisfactory exhibit of the operations and financial condition of the several corporations reporting, for the period named.

## COMPANY REPORTS.

The returns made to this office for the year 1881, in accuracy and uniformity of detail, are an improvement upon any heretofore received, and greatly lighten the labors of the Commissioner in gathering from them reliable information needed for his report. Under the provisions of act 144 of the session laws of 1881, authorizing the Commissioner to prescribe uniform systems of account, after meeting with the auditors or other accounting officers of the principal companies in the State, as mentioned in my last report, and a very general interchange of views upon the subject, I determined upon a system of accounts for uniform use as contemplated by the statute, and the same was promulgated to the companies on the 2d day of January last, and went into immediate effect. A few days subsequently a meeting of the accounting officers of the principal companies was held at Detroit, when a distribution of expenses was agreed upon under the general heads of accounts prescribed by the Commissioner, which was also promulgated in the form of a hand book, and is now the basis of classification under which all items of expenditure are taken up and are to be reported to this office.

It gives me pleasure to add that the action of the Commissioner in this

particular has met with a favorable response from some of the Commissioners of contiguous States, traversed by lines common to each, and it seems probable that at an early day the different forms of reports as prescribed in the different States will have been replaced by one alike in all, and the labor and perplexity to the companies incident to the multiplex returns heretofore required will no longer exist, a consummation not only desirable on the latter account, but one that will make the reports of far greater value for purposes of ascertainment and comparison of expenses of management, operation, and cost of movement of passengers and freight.

It will, however, be of still greater value in producing a more reliable set of returns from the railroad companies, and furnishing means of testing such returns by an examination of the books. The wisdom of the legislatior authorizing the Commissioner to establish a uniform system of accounts, car no longer be a question for controversy in this State. Questions that hav arisen within the last year, involving the revenue due the State from such cor porations, show conclusively that without such a system, and such power, i the Commissioner, railroads paying taxes on gross earnings could so compl cate their accounts, by combinations with other corporations, as to defrau the State of a large amount of its just revenues. To avoid this the Commi sioner found it necessary on the 14th day of June, 1882, to issue an ord prescribing the mode in which accounts should be kept by railroad corpor tions operating other railroads, consisting of distinct corporations — a copy which order will be found in the appendix hereto. As the State relies upon t returns from railroad companies to this office for the purpose of ascertaining t amount of tax properly assessable against each corporation for the year, t necessity for a systematic mode of book-keeping on the part of such corpo tions becomes apparent, and the question as to precisely what territory t corporation reporting should cover, is one in which the State is materia interested. This becomes the more evident when we take into considerat the large and extended "systems" of railroads now coming rapidly to front, embracing frequently thousands of miles of railroad tracks, combi under one management, although consisting of many distinct corporatic some of the corporations being dividend paying, and others not paying o ating expenses, and interest. If the non-paying corporations can be grou with the paying ones, the average earnings per mile could be very lar diminished, and thus the rate of taxation per mile lessened. This has b attempted during the year involved in this report. One corporation adde the mileage heretofore reported 1,991.14 miles — and by so doing reduce average earnings per mile from $10,423.86 as reported in 1880, to $7,58 as reported for 1881. This increased mileage was not in consequence o increase of the track of the corporation proper, but was through the lea of other roads or the purchase of controling interests in the stock. I ref to accept of the report on the basis proposed, and issued the order heret

referred to, to correct the practice in the future, believing that the laws of Michigan contemplated that every corporation within the State, or lying partly within and partly without, should render a full report of its own doings regardless of any alliances made with other corporations,—that while such alliances might affect the general income of the "system," it should not be permitted to affect the earnings of each corporation within it, subject to the laws of the State of Michigan. In the particular case referred to, I obtained a supplemental report, which while it did not comply with the full requirements of the order, and could not, for the reason that the accounts did not give the data, it substantially gave us the same as heretofore returned by the same corporation, and a gross earnings of $11,374.46 per mile, and increased the revenue due from that corporation to the State about $31,000. Had the law not been passed authorizing the Commissioner to prescribe a system of accounts there would have been no mode of correcting the injurious results to the State of this blending of accounts of different corporations in one "system," and the State would have soon found its revenues from this source largely diminished instead of increased as it should be, and also the mode of ascertaining it thrown into inextricable confusion.

For the most part the annual returns of the companies are made within the period required by law. But some, and these not the largest corporations, have failed in this particular, and it was not until August that all the returns included in this report were filed and accepted by the Commissioner. Under the provisions of the statute now in force the railroad corporations are required to make their returns on or before the 1st day of May in each year. I am of the opinion that if the law was so amended as to change the date to the 1st of April it would work no hardship upon the companies and would greatly facilitate the business of this office in giving it longer time for accurately fixing and computing the taxes to be levied against the corporations, the report of which must be filed with the Auditor General on the 1st of July, and enabling it to make up and submit its annual report at an earlier date than is now possible after the closing up the business for each year.

One company, the Muskegon River and Rose Lake, has entirely failed to make any report, and inquiry reveals the fact that the road was abandoned, its track taken up, and the material removed before the close of the year. Although the road was an unimportant one, being a forest road, and only seven miles in length, still the precedent is a bad one, and it becomes a grave question how far such a course should be tolerated without making the officers and shareholders personally liable for taxes due to the State, or other debts to private parties, at the time they place the corporate property in their charge beyond the reach of process. In fact it is a serious question whether corporations should be allowed to be organized for the purpose of building railroads under our general laws merely for the purpose of drawing timber from the forest to mills or water courses. Such corporations are not generally

of a public character, but purely of private interest, and were not conte plated by the law.

CORPORATIONS.

The affairs of fifty-seven corporations are included in this report. The Esc naba & Lake Superior, operated by the Chicago & Northwestern, the Sagin & Grand Rapids, operated by the Detroit, Lansing & Northern, the Maniste operated by the Flint & Pere Marquette, the St. Joseph Valley, the Wabasl St. Louis & Pacific,—commercial roads,—and the Buckley & Douglas, a fore road, are now reported for the first time. During the year the Chicago West Michigan R. R. Co. consolidated with the Grand Haven and the Gran Rapids, Newaygo & Lake Shore Railroad Companies, to form the Chicago West Michigan Railway Company, which latter took corporate control of th consolidated properties on the 1st day of October, 1881. In February, th Detroit & Bay City road passed by perpetual lease into the control of th Michigan Central R. R. Co., and in September the Lake Shore and Michiga Southern Railway Company, by the same method, acquired the Detroit, Hills dale & Southwestern: In other particulars than above, the status remaine unchanged from the previous report, and at the close of the year the numbe of railroad corporations doing business in the State was fifty-four and th number of separate managements thirty-two.

TRACK, MILEAGE AND CONSTRUCTION.

The miles of track owned, as shown by this report, are very largely in excess of the previous year, being 11,465.93 miles for 1881 as against 5,810.08 for 1880, an increase of 97.34 per cent, This increase is the result not entirely of newly constructed road, but to a great extent, of track now reported for the first time to this office, and is largely composed of two items. The Chicago & Northwestern corporation reports 3,218.47 miles as against 1,227.33 for the previous year, and the Wabash, St. Louis & Pacific, the successor by consolidation, of the Detroit, St. Louis & Butler Company, adds the mileage of its system, 3,325 miles, to swell the figures. The two together make up 5,616.14 miles of the reported increase.

Being of the opinion that the new mileage reported by the Chicago & Northwestern Railroad Company formed no part of the corporation proper within the strict intent and meaning of the laws of Michigan providing for the consolidation of lines partly within and partly without the State, but rather that it belonged to proprietary and leased lines, wholly without, and in which we had no possible interest, I declined to recognize the mileage reported as the correct statement, and required a supplementary report which will be found printed in connection with the regular annual report from that company. The report from the Wabash, Pacific & St. Louis Company as to its mileage, being the first return made by that company to this

office, has been accepted subject to the regulation for future years in the order heretofore referred to.

The miles of road operated exhibit a nearly corresponding increase with that of the line owned, being 11,528,79 miles for 1881, and 6,427.34 for 1880, an increase of 5,101.45 miles or 79.52 per cent, and accounted for as in the case of miles owned.

The real amount of additional line constructed within the State during the year 1881, or now reported for the first time, was 441.43 miles, distributed as follows:

| | Miles. |
|---|---|
| The Chicago & Northwestern Railroad Company | 7.81 |
| Saginaw & Grand Rapids Railroad Company | 3.60 |
| Detroit, Mackinac & Marquette Railroad Company | 131.90 |
| Flint & Pere Marquette Railroad Company | 5.30 |
| Manistee Railroad Company | 25.53 |
| Marquette, Houghton & Ontonagon Railroad Company | 3.38 |
| Detroit & Bay City Railroad Company | 1.20 |
| Jackson, Lansing & Saginaw Railroad Company | 58.80 |
| Port Huron & Northwestern Railroad Company | 80.00 |
| Saginaw Bay & Northwestern Railroad Company | 2.25 |
| St. Joseph Valley Railroad Company | 10.00 |
| Tawas & Bay County Railroad Company | 2.00 |
| Toledo, Ann Arbor & Grand Trunk Railway Company | 15.00 |
| Wabash, St. Louis & Pacific Railroad Company | 78.28 |
| White River | 7.88 |
| Buckley & Douglas (forest road) | 8.00 |
| Hecla & Torch Lake Railroad Company | .50 |
| Total miles | 441.43 |

The companies below named report a decreased mileage as follows:

| | Miles. |
|---|---|
| The Chicago & West Michigan R'y Co. (consolidated) | 11.80 |
| Michigan Air Line R'y Co. | 1.00 |
| Total miles | 12.80 |

and leaving net additions of 428.63 miles as above stated.

Of double track there are 338.13 miles, and of sidings 1,744.02 miles, being an increase for the year of 6.84 miles for the former and 336.92 of the latter, and giving as the entire length of line if computed as a single track, 13,447.08 miles, exclusive of the side track of the Wabash, St. Louis & Pacific Company which is not reported. The latter company also fails to report the proportions of iron and steel in its tracks, but for the companies reporting there appears to be 5,743.27 miles of steel, and 4,478.81 miles of iron rails, the former being about 56 per cent of the whole.

TABLE SHOWING PROGRESS OF RAILROAD CONSTRUCTION IN MICHIGAN FROM 1838 TO 1881, INCLUSIVE.

| Year. | Miles. | Year. | Miles. | Year. | Miles. | Year. | Miles. |
|---|---|---|---|---|---|---|---|
| 1838 | 63 | 1849 | 353 | 1860 | 770 | 1871 | 2,298 |
| 1839 | 71 | 1850 | 380 | 1861 | 777 | 1872 | 2,822 |
| 1840 | 104 | 1851 | 421 | 1862 | 911 | 1873 | 3,252 |
| 1841 | 147 | 1852 | 425 | 1863 | 812 | 1874 | 3,313 |
| 1842 | 147 | 1853 | 425 | 1864 | 891 | 1875 | 3,347 |
| 1843 | 180 | 1854 | 425 | 1865 | 931 | 1876 | 3,410 |
| 1844 | 220 | 1855 | 462 | 1866 | 943 | 1877 | 3,455 |
| 1845 | 233 | 1856 | 530 | 1867 | 1,066 | 1878 | 3,564 |
| 1846 | 279 | 1857 | 579 | 1868 | 1,124 | 1879 | 3,657 |
| 1847 | 279 | 1858 | 703 | 1869 | 1,362 | 1880 | 3,823 |
| 1848 | 326 | 1859 | 770 | 1870 | 1,739 | 1881 | 4,252 |

From the above table it will be seen that the first report emanating from this office, being for the year 1872, shows the entire mileage of roads within the State to have been only 2,822, increased to 4,252 miles at the close of 1881, or a construction of 1,430 additional miles of line during that decade; but it will also be noted that from 1873 to the close of 1877, the period of the panic, there were only 203 miles of railroad construction within the State, while during the four years succeeding there were 797. Ten years since the railroad system of the State was confined almost entirely to the southern third of the Lower Peninsula, the business under the control of only 30 corporations and the whole value of their property represented by a stock and debt account of $259,271,228.40. Now of all the counties in the Lower Peninsula there are but eight—Alpena, Alcona, Benzie, Gladwin, Leelanaw, Montmorency, Oscoda, and Presque Isle—without railroad facilities. In the Upper Peninsula the 216.80 miles of railroad in 1872 have increased to 397.33 in 1881 and all its counties but three are now connected by rail with the outside commercial world, and the total amount of stock and debt now reported to this office is $507,710,593.69.

Up to the 1st day of October of the present year there has been reported to this office the following additional construction of main line:

| | Miles. |
|---|---|
| The Chicago, Detroit & Canada Grand Trunk Junction | 1.50 |
| Chicago & Northwestern | 36.90 |
| Escanaba & Lake Superior | 34.44 |
| Chicago & West Michigan R'y | 1.00 |
| Cincinnati, Wabash & Michigan | 24.50 |
| Detroit, Mackinac & Marquette | 3.40 |
| Manistee | 1.00 |
| Grand Rapids, Indiana & Mackinac | 37.47 |
| Michigan Central | 5.75 |
| Port Huron & Northwestern (narrow gauge) | 68.00 |
| Saginaw Bay & Northwestern | .75 |
| Tawas & Bay County | 4.82 |
| Saginaw, Tuscola & Huron (narrow gauge) | 51.29 |
| Buckley & Douglas (forest road) | 1.50 |
| Total | 272.32 |

There has also been a section of 20 miles of road constructed by the Ontonagon & Brulé River Co. in the Upper Peninsula, which should be added to the above figures, making 292.32 miles of road for the present year, and giving at the date of this report a total for Michigan of 4,544.90. In addition to the above there has also been built an aggregate of 57.09 miles of siding since the commencement of the year. It is also reported that work has been or very soon will be renewed on the new roads commenced and not completed previous to the panic and on some of which large amounts had been expended before the stringency of the times compelled the suspension of further operations, and it is not improbable that such enterprises will be pushed to a successful completion before the close of another year.

### CAPITAL STOCK.

The amount of capital stock paid in as reported for 1881 is $239,505,422.14, being an increase of $78,925,102.09 or 49.77 per cent. This very heavy increase of the stock, as with the mileage, is the result of the large additions made to the account by the Chicago & Northwestern, Detroit, Mackinac & Marquette, and Wabash, St. Louis & Pacific Companies, details of which will be found further on in the summary of changes in Stock, Debt, and Cost. With the increasing mileage the stock per mile continues to decrease, figuring in the present report at $20,890.00, being $6,486.48 or 20.02 per cent less than the last report.

### DEBT.

The debt of our railroad corporations instead of continuing to diminish, as was the case for the previous year was largely increased during 1881. An explanation of this result will also be found in the summary above referred to, to which your attention is respectfully directed, as well as to Table No. 3 accompanying the report, where will be found details of the debt account in full.

In the last report the indebtedness account figured as follows:

| | |
|---|---|
| Funded debt | $142,212,896 73 |
| Floating debt | 11,159,412 17 |
| Total | $153,372,308 90 |

Per mile of road, $26,147.63.

For 1881, the following is the debt statement:

| | |
|---|---|
| Funded debt | $245,907,462 77 |
| Floating debt | 22,593,142 02 |
| Total | $268,500,604 79 |

This amount per mile of road is $23,408.09, being a decrease from last year of $2,739.54 per mile, while the liabilities are increased by the increased mileage in the sum of $115,128,295.89 or 75.06 per cent.

### STOCK AND DEBT.

The total stock and debt which will be carried over from the present report is in the sum of $507,710,593.69. This is an increase of $193,757,964.74 or 61.07 per cent from the commencement of the year. Per mile of road it is $44,275.71 which is $9,248.40 or 17.27 per cent less than for the last year. The amount of stock and debt which would properly be chargeable to Michigan with these figures as the factors, would be $188,257,300.00..

### COST.

The cost of the properties belonging to the railroad corporations doing business in the State has not in fact increased in an approximate ratio with the increase of the stock and debt, although the margin between the two is apparently diminished by the figures of our present report; but it is not likely that this feature in the condition of our railroad finances will improve so long as the disposition prevails in the organization of new companies to swell the capital accounts far beyond the actual cost of the property.

The total cost of the properties covered by this report figures at the sum of $487,560,525.69, being $42,520.00 per mile of road. This is an increase upon the last report of $190,171,608.56 or 63.93 per cent, but a decrease per mile of $8,629.95 or 16.87 per cent. The reported cost of new road for the year is $3,586,356.18 less than the increase of the stock and debt, thus adding that amount to the railroad capital representing no value in railroad property.

TABLE SHOWING FLUCTUATIONS OF STOCK AND DEBT OVER COST FROM 1873 TO 1881, INCLUSIVE.

| Year. | Excess of Stock and Debt over Cost. |
|---|---|
| 1873 | $14,605,531 11 |
| 1874 | 13,241,471 81 |
| 1875 | 17,563.469 80 |
| 1876 | 19.556,513 93 |
| 1877 | 20,102.224 28 |
| 1878 | 18,435,558 69 |
| 1879 | 17,091.975 90 |
| 1880 | 16,563,711 82 |
| 1881 | 10,150,073.00 |

If the increase of $3,586,356.18 of this land of capital had not been added this year, the excess would have been only $6,563,716.82, which would have been a very gratifying showing were it not for the fact that I am satisfied the *reported* cost of construction in many cases far exceeds the *actual* cost.

### SUMMARY OF CHANGES IN STOCK, DEBT, AND COST.

The Chicago and Grand Trunk reports an increase of its indebtedness in the sum of $1,348,486.58, of which $794,400 is funded debt and the remainder unfunded, and an increase of the cost of the property of $708,338.92.

The Chicago & Northwestern Railroad Company reports an increase of stock and debt over previous statement of $44,524,960.66, of which amount $21,401,000.00 figures in the funded debt, and $21,669,360.63 in the stock, with an increased cost of property of $52,225,316.19. The last preceding report of this company on a mileage of 1,227.33 miles, as against 3,218.47, in this gave an excess of stock and debt over cost of $4,052,075.77. The entire stock and debt as now reported is $123,402,702.86 against a total cost of $127,043,982.62, being an increase of cost over stock and debt of $3,641,279.76, thus bringing their property account upon a much more satisfactory relative footing with stock and debt, and making a change in two years of $7,700,355.53.

The Chicago & West Michigan R'y Co., organized during the year by the consolidation of the Chicago & West Michigan R. R. Co., with the Grand Haven and the Grand Rapids, Nowaygo & Lake Shore Co., returns a funded debt of $3,087,500.00 and a floating debt of $257,261.00 which is an increase upon that of the several companies before consolidation of $1,831,500 funded debt, and of total indebtedness of $2,085,381.04. But the stock account is less by $704,166.67, leaving the net increase of stock and debt $1,381,214. The cost of the property under the consolidation is fixed at $8,800,942.28, which is a decrease of $465,855.02 from the figures of the last report, and the stock and debt exceeds the cost in the sum of $1,340,652.

The White River Co. is reported with an increase of stock and debt of $46,489.19, of which amount $31,000 is carried in the capital stock. The cost of the property is increased $64,402.29.

The Detroit, Lansing & Northern reports an increase of $128,000 in its funded debt, which makes its entire stock and debt $7,872,340.40. The cost of the property figures at $7,545,695.04. This company also controls and operates the completed portion of the Saginaw & Grand Rapids Company's road, and for the first time reports its capital stock at $70,000, and the cost of the property at the same amount.

The Detroit, Mackinac & Marquette R. R. Co. makes the first statement of its stock and debt account. It reports its capital stock at $6,250,000, which, upon the assumed length of line, 200 miles, is $31,250 per mile. But the length of line actually built from Point St. Ignace to Marquette is 151.90 miles, which, as the construction of the branch to Sault Ste. Marie is perhaps a remote if not uncertain event in the future, should be taken as the mileage basis for the purposes of this report, and would give $41,118.42 per mile instead of the figures quoted. The funded debt is reported at $9,060,000, of which sum $4,560,000 are denominated land grant bonds. This debt is reported at $45,300 per mile for 200 miles. For 151.90 miles actually constructed it would be $59,574.88 per mile. The entire stock and debt as reported is $15,310,000, or $100,693.30 per mile. The cost of the property is returned at $12,041,892.01, with the further sum of $2,220,000 set aside for

the future construction of the Sault Ste. Marie branch. Exclusive of the latter the cost as reported is $79,274.67 per mile.

The Flint & Pere Marquette Co. reports an increase of stock and debt of $2,094,013.24, of which $1,454,401.10 is funded, and $444,412.14 floating debt, and $195,200 is capital stock, the cost of the property being nominally increased $1,689,882.11 by the payment of $951,395.72 on indebtedness of the old organization by the present company as part of the purchase, and the further sum of $733,490.39 for new work. The entire stock and debt at close of report was $11,765,975.14, the cost $11,361,841.01. This company also controls and operates the newly constructed Manistee road, and reports its stock at $368,605.31, and the cost of the property at $367,069.07.

The Fort Wayne & Jackson Co. has increased its stock account during the year $7,379.73, and reports an equal increase in the cost of the property.

The Lake Shore & Michigan Southern Co. shows a total stock and debt account at the close of its report of $89,046,407.30, or $103,574.14 per mile. This is an increase over the figures of its last report of $3,381,407.30, $1,250,000 of which sum is in the funded, and the remainder in the unfunded debt. The cost of the property now figures at $82,650,000, or $90,603.67 per mile.

The Marquette, Houghton, & Ontonagon Co. reports considerable changes in its capital accounts during 1881. The funded debt is reduced $2,000,500, which leaves the stock and debt account at the close of the year $6,813,231.75 and the cost of the property $9,175,883.47, an increase in the latter item from last year's figures of $173,114,89.

The Detroit & Bay City R. R. Co. during the year passed under the proprietary control of the Michigan Central and the following changes are reported in its capital accounts: The funded debt was increased in the sum of $1,670,000, but the floating debt of $1,745,510.84 was extinguished, a net decrease of debt of $75,510.84. The capital stock was increased $674,250, making the stock and debt as reconstructed $6,000,000, an increase of $598,739.16 from the last report. The cost of the property as charged out by the present owners is $3,541,038.89, a decrease of $921,893.52 from former figures. The stock and debt are now in excess of cost $2,458,961.11.

The Jackson, Lansing & Saginaw, also controlled by the Michigan Central, reports an increase of funded debt of $899,000, and of stock $9,500. Total $908,500, with an increase in the cost of property of $7,801.59. Present stock and debt, $6,306,790; cost, $6,929,286.77.

The Kalamazoo & South Haven is reported with an increase of stock of $250,400, which is covered by the increased cost of the property, leaving the figures on that account $1,150,335.24 against $1,035,400 as stock and debt.

The Port Huron & Northwestern (narrow gauge) shows an increase of stock and debt during the year of $1,086,842.74, $471,840 only of which have

been capitalized, $230,000 into funded debt, and $241,840 into stock. The company reports $1,308,716 increase in the property accounts during the period under report, giving $1,983,129.36 as the entire cost of property, and $1,982,386.53 as the total stock and debt.

The Saginaw Bay & Northwestern Co. has radically reconstructed its accounts during the year, showing a decrease in stock and debt of $194,366.70. This has been accomplished by nearly wiping out its stock, which is now but $20,000 instead of $300,000 as per last report. The total stock and debt now figures at $224,959.04, the cost, $224,235.25.

The St. Joseph Valley, a new company, makes its first report, giving its stock at $53,400; its funded debt, $25,000; total, $78,400; cost, $98,698.77, the difference being floating debt.

The Toledo, Ann Arbor & Grand Trunk reports an increase of funded debt of $510,000.00. Its total stock and debt figured at $1,818,884.36 as against a cost of property of $1,359,644.85, an increase of the latter of $550,636.24, from the report of last year.

The Wabash, St. Louis & Pacific R'y Co. makes its first report to this office with its system of 3,325 miles of road. Its total stock and debt account foots at $122,338,646.78. $66,291,858.27 is in funded debt, and $49,954,700.00 capital stock, while its extended properties are carried on to its books at a total cost to the corporation of $119,237,681.17, or about $32,853 per mile.

The Buckley & Douglas R. R. Co. is a new forest road, built during the year 1881, at a reported cost of $45,618.89, with a stock and debt of $53,100.00.

The foregoing summary includes the principal changes in the capital accounts of the companies reporting to this office for the year 1881, but the value of the comparison with statements of previous years is greatly impaired by reason of the large increase of mileage, stock, and debt reported by the Chicago and Northwestern and Wabash systems, including large properties without the State, and which could not be remedied under the accounts as heretofore kept by such companies, but which I have reason to believe will in the future be differently reported. There have been, however, a few unimportant changes not noticed, for the details of which as well as of those included in the summary I respectfully refer you to Table No. 23, accompanying this report.

## GENERAL EXHIBIT.

A comprehensive statement of the receipts and disbursements of the companies reporting to this office, for the year 1881, will be found in the following General Balance Sheet, but for full details and particulars of financial affairs during that period reference is had to Table No. 1, published with the report:

GENERAL BALANCE SHEET.

*The Railroads of Michigan in General Account.*

DR.

| | |
|---|---|
| To balance brought forward from 1880 | $9,693,732 23 |
| Credit balances from accounts of previous years not taken to account in 1880 | 1,705,962 64 |
| Gross revenues for transportation account | 76,322,484 14 |
| Receipts from other sources than earnings | 280,287 33 |
| | $88,002,466 34 |

CR.

| | |
|---|---|
| By total expenses and taxes, 1881 | $50,454,951 15 |
| Interest paid on the funded debt | 13,825,472 46 |
| Interest paid on the floating debt | 310,675 67 |
| Rentals paid | 3,001,321 75 |
| Dividends paid | 9,055,250 60 |
| Disbursements other than for above | 3,547,973 02 |
| Balance carried forward to 1882 | 7,806,821 69 |
| | $88,002,466 34 |

The general current income for the present year is $18,947,818.82—33.02 per cent in excess of that reported for the previous year, and the current operating and other expenses show an increase for the same period of $18,-182,019.92, being 56.34 per cent.

The following companies failed to realize sufficient income to cover their ordinary operating expenses, the amount of their deficiencies being as per statement:

| COMPANIES. | Deficiency. |
|---|---|
| Chicago & Canada Southern | $2,043 46 |
| Chicago, Detroit & Canada Grand Trunk Junction | 30,470 27 |
| Detroit, Hillsdale & Southwestern | 1,883 22 |
| Michigan Midland & Canada | 833 71 |
| St. Joseph Valley | 2,590 32 |
| Toledo, Canada Southern & Detroit | 31,692 20 |
| Hecla & Torch Lake | 22,269 15 |
| Hobart & Manistee River | 2,147 80 |
| Lake George & Muskegon River | 16,035 37 |
| Total for 9 roads | $109,965 50 |

The above statement adds three companies to the list for the preceding year that failed to earn operating expenses, while one takes its place with the majority. The amount of deficiency is larger by the sum of $45,546.86

than last year. The number of companies unable to meet both expenses and interest from current income was seventeen, the balances which they were obliged to carry over for debit amounting to $3,276,008.14. It is proper to say that $2,441,366.23 of this amount is in the accounts of the Wabash, St. Louis & Pacific, who nevertheless declared and paid a dividend requiring the sum of $1,329,718.50.

## ANALYSIS OF EARNINGS AND EXPENSES.

### *Earnings.*

The earnings statement for the year foots at the sum of $75,195,845.92, an excess over the previous year of $18,545,791.32, or 32.73 per cent. The earnings accrued as follows:

| | |
|---|---|
| Passengers | $18,473,153 71 |
| Express | 1,394,834 11 |
| Mails | 1,698,603 28 |
| Freight | 53,239,707 02 |
| Miscellaneous | 305,621 92 |
| Unclassified | 173,925 38 |
| Total | $75,195,845 42 |

As divided between the passenger and freight departments of the different roads, the former is entitled to a credit of $21,570,439.71 or 28.68 per cent, and the latter to $53,625,405.71, or 71.32 per cent, a slight increase in favor of the passenger business upon the figures of last year.

The following are the per cents of increase upon the reports of 1880 for similar classes of business:

| | |
|---|---|
| Passenger | 31.10 |
| Express | 64.87 |
| Mail | 57.25 |
| Freight | 28.14 |
| Miscellaneous | 46.91 |

Per mile of road operated the earnings for 1881 were $6,558.19, a falling off from the previous year of $2,173.32 or 24.90 per cent. Per train mile run, the passenger trains give $1.35.5 and the freight $1.59.5, the average being $1.52, the result being a decrease of $0.12.6, $0.21.1, and $0.12 respectively on the figures of the previous year.

The receipts from other sources than ordinary transportation earnings were $1,126,638.72, an increase over 1880 of $402,027.50—55.48 per cent, and the gross receipts were $76,322,484.14, being an increase of $18,947,818.82 or 33.02 per cent upon the business of the preceding year.

The proportion of earnings credited to Michigan for 1881 upon the mileage basis was $24,787,329.72; for the previous year it was $23,139,642.27, being a gain for 1881 of $1,647,687.45, or 7.71 per cent.

*Expenses.*

The ordinary operating expenses and taxes for the year 1881 amounted to the sum of $50,271,575.46. This was an increase on the figures of the previous year of $18,002.578.72—55.78 per cent. The increase of earnings exceeded the increase of expenses by the sum of $543,212.60 or about 3 per cent. As distributed to the different classes of expenditure, exclusive of one company that failed to report a distribution of its expenses, the following result is shown:

| | |
|---|---|
| Maintenance of way | $12,882,459 51 |
| Maintenance of motive power and cars | 6,838,679 08 |
| Conducting transportation | 24,559,240 00 |
| General expenses including taxes | 5,939,229 34 |

The per cent of earnings to expenses was 66.85, an excess over the per cent of the previous year of 10.32. The expenses per mile of road were $4,384.43, a decrease of $641.15 from the charges of last year. Per train mile the figures are $1.01.6, an excess from the previous report of $0.25.2. The net earnings above operating expenses were $24,924,269.56, an increase of $543,212.20 over 1880, or 22.28 per cent, and given in detail the following is shown:

| | |
|---|---|
| Net earnings per mile of road | $2,173.76 |
| Net earnings per train mile | 0.50.20 |

For convenience of reference and comparison, I continue the table covering the operations of five consecutive years, commencing with 1877, giving in small space a resumé of the earnings and expense accounts:

| | 1877. | 1878. | 1879. | 1880. | 1881. |
|---|---|---|---|---|---|
| Total earnings | $39,545,930 06 | $42,716,139 05 | $45,942,860 23 | $56,650,034 10 | $75,195,845 42 |
| Total earnings per mile of road | 6,830 85 | 7,072 76 | 7,450 14 | 8,731 54 | 6,558 19 |
| Total earnings per train mile | $1.48.7 | $1.49.51 | $1.45.5 | $1.64 | $1.52 |
| Total expenses | $25,601,853 04 | $25,633,734 67 | $26,906,685 44 | $32,268,936 74 | $50,271,575 46 |
| Total expenses per mile of road | 4,421 72 | 4,244 32 | 4,363 21 | 5,025 58 | 4,384 43 |
| Total expenses per train mile | $0.96.02 | $0.89.72 | $0.85.26 | 0 76.4 | $1.01.6 |
| Per centage of expenses to earnings | 64.74 | 80. | 58.56 | 56.53 | 66.85 |

INTEREST.

The interest account of the present report shows a very heavy increase over that for the last year, and is as follows:

| | |
|---|---|
| For interest on funded debt | $13,825,472 46 |
| " " floating " | 310,675 67 |
| Total | $14,136,148 13 |

The excess from 1880 is $4,790,024.41, the result of an increased charge to the account by the Chicago & Northwestern Company in the debt of the new roads reported, of $2,380,511.82, and of the heavy interest on the debt of the Wabash system now taken up in our report for the first time and amounting to the sum of $3,492,409.19. Without these additions to the fixed charges, the account would have shown a decrease of $1,082,896.60.

### RENTALS.

This account for the same reason that affected that of interest is largely in excess of the report for the previous year and now figures at $3,001,321.75 as against $1,905,171.57 for 1880.

### INTEREST AND RENTALS.

Figured together the interest and rentals for the year foot at the sum of $17,137,469.88, an increase of $5,886,174.79 or 52.32 per cent, and are—

| | |
|---|---|
| Per mile of road | $1,494 64 |
| Per train mile | 0.34.65 |
| Per cent of earnings | 22.79 |

### OPERATING EXPENSES, INTEREST, AND RENTALS.

Combining all items of expenditure payable from the gross receipts, we find the amount to be $67,409,045.34, an increase of $23,888,753.51 or 54.63 per cent from the preceding year. Analyzed the figures give—

| | |
|---|---|
| Per mile of road, increase from 1880, 11.75 per cent | $5,879 07 |
| Per train mile | 1 36.29 |
| Per cent of earnings | 89.66 |

From the foregoing analysis of earnings and expenses it is shown as the result of operations for the year under report that the railroads reporting to this office returned to their share-holders—

| | |
|---|---|
| Net earnings | $7,786,800 08 |
| " " per mile of road | 679 12 |
| " " train mile | 0.15.71 |
| Per cent of earnings | 10.34 |

### INCOME AND DIVIDENDS.

From our General Exhibit, "Table 1," it appears that the gross receipts from all sources of revenue during the year 1881 were $76,148,538.76. Deducting from this amount the operating expenses and the deficiencies of the companies, whose revenues were insufficient to meet their expenditures, and there remains a balance to the credit of income of $25,867,532.99.

From this balance is to be charged off the following:

| | |
|---|---|
| Interest on funded debt | $13,825,472 46 |
| " " floating " | 310,675 67 |
| Rentals | 3,001,321 75 |
| Totals | $17,137,469 88 |

This leaves to the credit of the account as net income, $8,730,063.11.

As against this balance dividends were declared and paid as follows:

| | |
|---|---|
| The Chicago & Northwestern, 7 per cent on preferred stock, 6 per cent on common | $2,438,139 00 |
| The Chicago & West Mich. R. R. $2.50 per share on 16,429 shares | 153,572 50 |
| The Detroit, Grand Haven & Milwaukee, 3 per cent for 1880, 4 per cent, 1881, 6 months | 105,000 00 |
| The Detroit, Lansing & Northern, 7 per cent on preferred stock | 175,231 00 |
| The Flint & Pere Marquette, 5½ per cent | 357,500 00 |
| The Fort Wayne & Jackson, 2½ per cent | 58,479 00 |
| The Lake Shore & Mich. Southern, 8 per cent | 3,957,320 00 |
| The Michigan Central, 2½ per cent | 468,455 10 |
| The Mineral Range, 10 per cent | 11,635 50 |
| The Wabash, St. Louis & Pacific, 6 per cent on preferred stock | 1,329,918 50 |
| Total | $9,055,250 60 |

Deaving a deficiency in the year's business, after paying expenses, interest, rentals and dividends, of $325,187.49. Deducting this amount from the balance brought over from last year of $5,607,497.37, there remains to the credit of the account the sum of $5,282,309.88.

### MAINTENANCE OF WAY.

The reports show an expenditure on this account during the year of $12,882,459 51. The details of this outlay will be found upon reference to Tables 9 and 10. The money thus applied equalled $1,123 per mile of the whole system operated. As the practical result of the expenditure there were put into the track 3,864,040 new ties, 1,888,969 of which were in Michigan, being an average of 444 new ties to the mile; 48,269 tons of new rail, amounting to 738 miles, were placed in the track during the year; 666 cattle guards were built or renewed, and 2,919,711 feet of timber were used for the repairs or strengthening of wooden bridges. The work of replacing trestles with earthen embankment has not been discontinued, there having been during the year 13,307 feet or 2.52 miles of this class of improvement accomplished, and 281 culverts have been newly built or reconstructed in a more substantial manner. The track in Michigan is divided into 842 sections, averaging 5.05 miles, and 4 track men to the section. The result of this very liberal provision for the maintenance of the permanent way is seen in the immunity from serious accident and the constantly decreasing per cent of expenditure for main-

tenance of rolling stock. There have been but few derailments and with one exception not serious; no accidents from the falling of bridge structures, and a critical examination of a large proportion of the lines of road traversing this State made by me during the year reveals the fact that their condition is in no wise deteriorating, but with better methods and increasing revenues, is steadily improving.

### BRIDGE, CULVERT, AND CATTLE-GUARDS.

The number of bridges reported is 1,641, classified as follows:

| | | |
|---|---|---|
| Wood | No. 818—feet in length | 74,819 |
| Stone or iron | No. 60—feet in length | 8,928 |
| Combination | No. 24—feet in length | 2,733 |
| Wooden trestles, | No. 739—feet in length | 96,830 |
| Total feet in length | | 183,310 |

These figures give 34.71 miles of bridge structures in the State, being an average of 280 feet to each mile of road.

The new bridges erected during the year in place of old structures were 34, and are reported as follows:

| | | |
|---|---|---|
| Wood | No. 20—feet in length | 3,120 |
| Iron and stone, | No. 11—feet in length | 1,569 |
| Combination | No. 3—feet in length | 385 |
| Total feet in length | | 5,074 |

0.87 miles.

The character and condition of the bridges on our railroads have greatly changed for the better, and I am pleased to note the coöperation of managements generally with the efforts of this department to have a high standard of excellence attained in that particular.

### RAILROAD CROSSINGS.

There were seventy-five crossings of railroads in this State reported at the close of the year 1881, seventy of which were at grade and only five over or under the road intersected. Our laws in order to encourage the construction of railroads and thereby develop the resources of the State, have been extremely liberal in permitting new companies to locate and construct lines of railroad, wherever the means could be obtained to build them, without any particular regard to the public necessity, leaving the question of such necessity to be determined in each particular instance by commissioners or a jury in proceedings for condemnation of lands for the right of way. In such proceedings the public necessity is practically limited to the taking of the land in controversy, and the necessity for the railroad itself, and the public end to be gained

by it, is not considered. The point selected for the crossing of another railroad is thus left entirely optional with a new company, and is usually adopted by it, with sole reference to its convenience and needs, without regard to the effect upon the road to be crossed. Much bad feeling is thus engendered between the corporations; physical force is frequently used to prevent the crossing, and fierce litigation; and the final result is the refusal to furnish the proper facilities for the exchange of business between the two roads, to the pecuniary injury of both, and the embarrassment of commerce. Such crossings are often made at points extremely dangerous to the traveling public, and to the business of the roads. It would be well for the Legislature to consider whether some tribunal could not be established, to first decide upon the general public necessity of any proposed new route, before the filing of articles of association and the acquiring of corporate powers, and also to assent to its located line of road, and particularly its proposed crossing of other railroads. Wherever practicable roads should be either over or under roads already constructed, both as a matter of public safety and practical utility.

The great progress that is being made in railroad construction, and the rapidly increasing number of crossings resulting therefrom, brings this subject to our consideration with greater force. The Chicago & Grand Trunk Railroad Company reports twelve railroad crossings at grade within the State; the Grand Rapids & Indiana, fourteen; the Lake Shore and Michigan Southern and leased lines ten; the Michigan Central and leased lines, thirty. To bring a train passing the length of the road to a full stop, as many times as these crossings require, means a great loss of time and detention of traffic; add to this the necessary injury of machinery and rolling stock caused by these frequent stoppages and the increased expense therefrom, it would seem evident that if any plan or device could be adopted that will permit trains to pass these crossings without stopping, with equal safety, it should be authorized by law. During the past summer I spent some time in examining the workings of the interlocking switch and signal system in use on the Boston and Albany road at South Framingham, Mass., and also on the Pennsylvania Central Railroad at the approaches to its station at Broad street, Philadelphia. I also examined the working of the same in the office of the company at Pittsburg. If that system can be carried out, of which I entertain little or no doubt from the investigations I have given it, it would seem to remove all danger of collisions at grade crossings where it is adopted for use. The laws of Massachusetts and of Ohio, which are similar to our own in requiring the stoppage of all trains before crossing another railroad track, have been amended so as to permit of trains crossing under this system without stopping. I would respectfully suggest that the attention of the Legislature be called to this subject, with a view to adopting some such amendment to our own law if it should be deemed safe to do so.

### HIGHWAY CROSSINGS.

As the railroad lines extend and the newer portions of the State develop, the number of these crossings rapidly increases, and at the close of 1881 there are reported 4,714, classified as follows:

| | |
|---|---|
| At grade without gates or flagmen | 4,435 |
| " " with " " " | 122 |
| Over the railroad | 91 |
| Under " " | 66 |

The number of casualties at these exposed points continue to be happily very small, only 12 during the year, or one for each 393 crossings, and these generally from a lack of caution on the part of citizens rather than of the railroad employés. Of the over-head bridges there still remain 24 less than 18 feet above the track.

A plan for safety-guards at overhead obstructions as contemplated by the statute of 1881 was decided upon and they are reported constructed at exposed points as required by law, but as to their utility a difference of opinion exists. So far as I have learned they are regarded by the majority of employés with disfavor, but the device has probably as yet not been sufficiently tested to fully determine either its efficacy or lack of merit.

*Culverts and Cattle Guards.*—Of the former there are 5,648, and of the latter 7,464 on the lines within the limits of this State, giving an average of such openings of rather more than three to each mile of track.

### STATIONS AND EMPLOYÉS.

The whole number of stations reported is 2,336, of which 889 are in Michigan and of the whole number of persons employed—58,241—19,166 were in this State, an average of a station to each 4.78 miles, and nearly 5 employés to each single mile of road.

### FENCING.

There were at the close of the year under report 5,672 miles of fence completed, as against 5,009.83 at the close of the prior year. There were newly built and renewed during the year 728.69 miles, and the whole construction account for fencing foots at $1,423,485.62. There remained to be constructed at the close of the year 1,677.32 miles, the greater proportion of which is through the unsettled portions of the State, and north of the line extending due west from the mouth of Saginaw river, where the penalty prescribed for failure to fence does not attach. Section 17 of Article IV. of the General Railroad laws of this State prohibits the operation of railroads through enclosed lands without the consent in writing of the owner or occupant, for a longer time than six months after a road is first opened for use unless fenced,

and requires the Commissioner upon complaint being made by a person owning or occupying such lands where a railroad is being so operated in violation of law, to ascertain the facts in regard thereto, and if such road is being so operated, to cause notice to be served on the officer operating such road, requiring the fences and cattle-guards to be constructed within sixty days from date of such notice. In case of failure to comply with the order the Commissioner is required to cause proceedings to be instituted in the name of the people of the State of Michigan by the prosecuting attorney of the proper county to enjoin the operation of such road until the fences and cattle guards are constructed. Since the passage of said act, fifty-nine orders to fence have been issued under its provisions, and second complaints have been filed in four instances, and three proceedings instituted by the Commissioner in the courts to compel the fencing under the second clause of the law above referred to, which have been discontinued by the prosecuting attorney, and the costs paid by the railroad company, the former being satisfied that the fences were completed. Forty of the above mentioned complaints have been received during the present year, and the orders issued thereon. At the present time nearly all of the railroads operated through enclosed lands are fenced. There is, however, more or less dissatisfaction existing against the barbed wire fence that is being used very extensively by our railroads, and the Commissioner has been urged quite strenuously to condemn it under the provisions of act 175, Session Laws of 1881, which empowers the Commissioner to inspect and determine the sufficiency of all fences required by law to be constructed and maintained by railroad companies and to prescribe the manner of constructing, and the time when it shall be done. It is extremely doubtful whether the law contemplates that the Commissioner may prescribe the material of which a fence shall be built. The bill as originally introduced in the House expressly authorized him so to do, but the committee before whom it was considered rejected the clause authorizing the determination of the material, and the law as it now reads is to determine the sufficiency of fence required by law to be constructed, and section 15, Article IV., requires every railroad company to "erect and maintain fences on the sides of their respective roads of the hight and and strength of a division fence required by law." The fences and cattle-guards at all highway and street crossings to be sufficient to prevent cattle and other animals from getting on such railroads. Section 768, Compiled Laws of 1871, provides that all fences four and a half feet high and in good repair, consisting of rails, timber, board or stone walls, or any combination thereof, and all brooks, rivers, ponds, ditches, and hedges, or other things which shall be equivalent thereto in the judgment of fence-viewers within whose jurisdiction the same may be, shall be deemed legal and sufficient fences. The question then left for the Commissioner to decide, is whether any particular fence is of the hight and strength required by the above section,

and sufficient to prevent cattle and other animals from getting on the railroad. I am clearly of the opinion that the law did not contemplate granting the Commissioner power to prescribe the kind of material of which the fence should be built, and I think it would not be wise so to do. If the Legislature desires to prohibit barbed wire for fencing purposes, it should act directly on the subject, and make the law applicable to division or partition fences. The barbed wire is being very extensively used by the farmers in many portions of the State, both for interior and division fences, and hundreds of miles have been constructed by railroad companies. While upon the first introduction of the material there has been considerable prejudice against it, and a feeling of dissatisfaction, I believe that the use of the fence has proved quite generally satisfactory.

BUILDINGS.

As a rule the station buildings erected by the companies in this State may be classed as respectable, but there are exceptions, and in some instances the station-houses are not only very inadequate to the requirements of the business of the towns where located, but of a character not at all creditable to the corporations by whom they are owned. The railway companies have the benefit of good municipal government, police regulations, and well ordered fire departments without bearing any portion of the burdens of local taxation, and in return it seems but just that they should furnish fully adequate facilities for the transaction of business, and buildings that will compare favorably in architectural style with the structures by which they are sur-surrounded. It gives me pleasure to notice in this connection the completion by the Flint & Pere Marquette company at East Saginaw of a station and passenger house that in handsome design, excellence of construction, convenience of arrangement, and perfection of detail is excelled by but few if any in the country. It is alike creditable to the enterprise and liberality of the Flint & Pere Marquette company and an ornament to the flourishing city in which it is erected. The Grand Rapids & Indiana Railroad company is also erecting some very handsome station buildings on its Mackinaw extension. Although small and quite inexpensive they are of sufficient capacity for the new places where situated, and in style of architecture a cheerful departure from the typical station houses common to nearly all country towns.

The Port Huron & Northwestern narrow gauge company has also erected a very creditable general office and passenger building and separate freight shed at Port Huron, and in this particular shown no lack of the enterprise that in other respects has characterized the policy of that young corporation.

At Detroit the Michigan Central Railroad company has at last determined to remove the unsightly and dismal old shed that has so long done duty as a passenger house for that beautiful city, and plans and arrangements are completed for replacing it with a structure commensurate with the needs of the

company and the public, and at a cost to insure an edifice that will do no discredit to the commercial metropolis of our State. I am certain that no improvement that the principal railroad corporation of Michigan could make would be received with more general satisfaction, and another report will doubtless see it a fact accomplished.

### EQUIPMENT.

The rolling stock employed in the traffic of our railroads continues to increase in value and extent, and with the large shops and complete appliances maintained by the principal companies is kept in a condition of effective repair. The equipment at the close of 1881 was reported as follows:

| | |
|---|---|
| Locomotives of all grades | 2,276 |
| Passenger cars | 979 |
| Express and baggage cars | 461 |
| Freight cars, box | 38,236 |
| Stock cars | 6,329 |
| Platform cars | 17,568 |
| Ore cars | 5,471 |
| Conductors' way cars | 1,109 |
| All other cars | 990 |
| Total cars | 71,143 |

An increase of 66 per cent in motive power and 60 per cent in cars over the report of the previous year. The laws requiring tools to be carried on passenger cars, and passenger trains to be fitted with automatic power brakes have been complied with, and there seems to be a desire on the part of managements to provide the most improved appliances for the safety of the traveling and commercial public.

The reported expenditure for maintenance of rolling stock during the year was $6,838,679.08, which is 5 per cent upon the estimated value of the equipment. Per mile of road operated is $596.48, and per train mile of trains earning revenue is $0.13.8.

### TRAIN MILEAGE.

The following gives the miles made by trains of different service for the year:

| | |
|---|---|
| Passenger trains | 15,843,245 |
| Freight | 33,612,682 |
| For trains earning revenue, total miles | 49,455,927 |
| Added to the above is the mileage of work trains | 5,140,824 |
| And the mileage of switchers | 11,863,243 |
| And we have for the year a total mileage of | 66,459,994 |

No comparison that will be of value from the mileage of last year can be given here, on account of the largely increased train mileage reported by foreign corporations.

TRAFFIC.

*Passenger.*—The total number of passengers transported during the year was 18,914,933. For the previous year, 13,597,200. Excess for 1881, 5,317,733 or 39.10 per cent; of which the Chicago & Northwestern Railway Company reports 1,164,123 passengers in excess of last year, and the Wabash system, now reporting for the first time, 3,215,200, making an aggregate of 4,379,323, and leaving the excess aside from the reports of these two roads, 1,028,410, or 7.56 per cent, which may be deemed to be very nearly the excess over the passenger transportation of the previous year. The entire passenger mileage or passengers carried one mile was 824,103,330, an increase upon the figures of previous year of 262,120,506, equal to 46 per cent. The average distance traveled by each passenger was 43.57 miles for which he paid $0.98, the average rate per mile being $0.02.238, which is an increase of 2.32 miles average distance traveled, and a decrease of the rate per mile of 3.1 mills.

*Freight.*—The entire tonnage of commodities moved during the year was 37,779,555 tons, an increase upon the business of 1880 of 10,949,005, or 40.80 per cent. Of this increase the Chicago and Northwestern Railway Company carried 2,000,892 tons and the Wabash system 5,393,917 tons, making an aggregate of 7,394,809 tons carried by these two roads, and leaving the increase reported by other roads 2,054,196 tons, or 7.65 per cent over the tonnage for the previous year. The total freight mileage, or tons carried one mile, was 5,753,029,773, an increase of 963,608,964 tons, equal to 20.12 per cent. The average ton haul was 152.27 miles; the average amount received for each ton moved $1.72, and the rate per ton per mile $00.1.13. These figures are an increase over those of last year as follows:

On the average ton haul 30.05 miles.

On each ton moved 18 cents.

On the rate per ton per mile for each ton moved 2.7 mills.

The above results include both commercial and forest roads. Excluding the latter, which are purely local in their character, the average rate per ton per mile was 9.29 mills, including both local and through traffic. Excluding the Chicago and Northwestern and Wabash reports, the average freight rate was 7.62 mills.

For convenience of reference I continue the statement showing the per cent of commodities moved during each year since 1876:

| CLASSES OF FREIGHT CARRIED. | Per Cent. 1877. | Per Cent. 1878. | Per Cent. 1879. | Per Cent. 1880. | Per Cent. 1881. |
|---|---|---|---|---|---|
| 1. Grain | 18.64 | 24.49 | 25.15 | 10.84 | 17.76 |
| 2. Flour | 6.15 | 6.48 | 5.35 | 3.87 | 3.53 |
| 3. Provisions (beef, pork, lard, etc.) | 2.49 | 3.94 | 3.15 | 2.78 | 2.14 |
| 4. Animals | 6.47 | 5.99 | 5.21 | 4.84 | 4.91 |
| 5. Other agricultural products | 2.47 | 2.96 | 2.35 | 2.50 | 2.72 |
| 6. Lumber and forest products | 18.23 | 17.09 | 17.55 | 18.52 | 18.89 |
| 7. Coal | 6.74 | 5.18 | 6.60 | 7.92 | 11.03 |
| 8. Plaster | .59 | .40 | .45 | .47 | .50 |
| 9. Salt | .88 | 1.09 | 1.36 | 1.65 | 1.40 |
| 10. Petroleum | 5.81 | 3.62 | 2.45 | 1.32 | 1.07 |
| 11. Railroad iron,– iron and steel rails | .19 | .22 | .31 | 1.43 | 1.92 |
| 12. Pig and bloom iron | .57 | .69 | 1.06 | 1.61 | 1.84 |
| 13. Other iron and castings | 1.22 | 1.09 | 1.13 | 1.35 | 1.89 |
| 14. Ores | 7.63 | 6.49 | 8.00 | 10.31 | 9.13 |
| 15. Stone and brick | 1.50 | 1.08 | 1.12 | 1.39 | 2.00 |
| 16. Manufactures--articles shipped from point of producti'n | 2.16 | 2.46 | 2.32 | 2.62 | 2.96 |
| 17. Merchandise and other articles not enumerated above. | 17.06 | 16.78 | 16.44 | 18.58 | 16.31 |

## FREIGHTS.

While we have been able at last to determine with approximate accuracy the cost to the owner for moving a ton of freight one mile, we have not as yet adopted a rule by which to classify the traffic and divide it into local and through business so as to fix the rates of charges made against each respectively. In the last report from this office the hope was expressed that the difficulty surrounding the solution of this question was in a way to be obviated, on the basis of considering all freight that is billed over two or more roads, on joint or line way bills, as *through*, and all other freight billed between stations on one road to be considered *local*. Reflection, however, convinced me that figures derived from the application of this rule would have but little value, as under it large volumes of freight moving from one road to another, within the limits of the State, would be classified as through while charged little less, if any, than local rate. I accordingly directed a suspension of the rule so far as information for this office was intended, and no further decision having been reached with regard to the matter, each company has, as before, classified its local and through freight at its own discretion. It is probable that if the rates realized on competing and non-competing traffic could be properly kept and reported, the information thus gained would be of essential advantage in determining the fairness of

local tariffs now in force throughout the State. I subjoin a statement, showing the average local and through rates reported by ten different companies, embracing those receiving the highest and lowest rates respectively with the number of tons of the different classes of freight carried:

| COMPANY. | Tons of Freight Moved. | | Average Rate Charged. | |
|---|---|---|---|---|
| | Local. | Through. | Local. | Through. |
| Chicago & Grand Trunk | 172,361 | 705,964 | $0.01.39 | $0.00.44 |
| Chicago & Canada Grand Trunk Railway | 74,011 | 654,071 | 0.01.22 | 0.00.45 |
| Detroit, Grand Haven & Milwaukee | 350,973 | 138,237 | 0.02.14 | 0 00.459 |
| Flint & Pere Marquette | 1,003,059 | 10,906 | 0.01.45 | 0.00.472 |
| Grand Rapids & Indiana | 134,062 | 478,548 | 0.02 63 | 0.01.374 |
| Lake Shore & Michigan Southern | 7,865,206 | 1,299,302 | 0.00.70 | 0.00.46 |
| Marquette, Houghton & Ontonagon | 851,937 | 68,102 | 0.03.16 | 0.06.23 |
| Michigan Air Line | 17,833 | 4,580 | 0.07.11 | 0.02.26 |
| Michigan Central | 2,130,719 | 2,066,177 | 0.01.36 | 0.00.46 |
| Toledo, Ann Arbor & Grand Trunk | 23,768 | 37,688 | 0.03.99 | 0.01.274 |

The above figures, taken from the returns of companies, which, though probably not following a strictly uniform system of classification as between local and through traffic, still are significant, and indicate that the rate charged follows the volume of tonnage to be moved, and that our roads in fixing their tariffs are closely governed by that principle. The Michigan Air Line with its small tonnage claims the highest rate, while the Lake Shore & Michigan Southern with its immense volume of business accepts the lowest. The Marquette, Houghton & Ontonagon is exceptional to other roads of the State, in that she exacts a higher rate on her through than on her local business.

I also insert here a table from the annual report of the Lake Shore & Michigan Southern Railway Company for 1881, showing the volume of business and the great reduction that has been made in freight rates since 1870, twelve years, and the reduced cost of movement:

TONNAGE REPORT OF THE LAKE SHORE & MICHIGAN SOUTHERN RAILWAY COMPANY, 1870 TO 1881 INCLUSIVE.

| YEAR. | Tons. | Average Miles Hauled. | Tons One Mile. | Revenue. | Receipt per Ton per Mile. | Cost per Ton per Mile. | Profit per Ton per Mile. |
|---|---|---|---|---|---|---|---|
| | | | | | Cent. | Cent. | Cent. |
| 1870 | 2,978,725 | 192.7 | 574,035,571 | $8,746,126 | 1.504 | .932 | .572 |
| 1871 | 3,784,525 | 193.9 | 733,570,636 | 10,341,218 | 1.391 | .913 | .478 |
| 1872 | 4,443,092 | 208.2 | 924,844,140 | 12,824,862 | 1.374 | .920 | .454 |
| 1873 | 5,176,861 | 203 6 | 1,054,927,189 | 14,192,339 | 1.335 | .946 | .389 |
| 1874 | 5,222,257 | 191.4 | 999,342,081 | 11,918,350 | 1.180 | .767 | .413 |
| 1875 | 5,022,490 | 187.8 | 943,236,161 | 9,639,038 | 1.010 | .737 | .273 |
| 1876 | 5,635,167 | 201.2 | 1,133,834,326 | 9,405,629 | .817 | .561 | .256 |
| 1877 | 5,513,388 | 195.9 | 1,080,005,561 | 9,476,608 | .864 | .573 | .291 |
| 1878 | 6,598,445 | 219.8 | 1,340,467,821 | 10,048,952 | .734 | .474 | .260 |
| 1879 | 7,541,294 | 229.9 | 1,733,423,440 | 11,288,361 | .642 | .398 | .244 |
| 1880 | 8,350,336 | 221.7 | 1,881,166,018 | 14,077,294 | .750 | .435 | .315 |
| 1881 | 9,164,508 | 220.6 | 2,021,775,468 | 12,659,987 | .617 | .414 | .203 |

The following is a statement showing the number of tons carried one mile by the companies reporting to this State, and the average rate per ton per mile since 1874—eight years:

TONS OF FREIGHT MOVED ONE MILE AND THE RATE PER TON PER MILE BY COMPANIES REPORTING TO MICHIGAN, 1874 TO 1881, INCLUSIVE.

| | Tons Carried 1 Mile. | Rate per Mile. |
|---|---|---|
| 1874 | 1,932,955,796 | 0.01 37 |
| 1875 | 1,954,003,452 | 01.20 |
| 1876 | 2,323,961,690 | 00.982 |
| 1877 | 2,292,655,424 | 01.032 |
| 1878 | 2,858,931,229 | 01.053 |
| 1879 | 3,598,676,485 | 00.92 |
| 1880 | 4,789,420,773 | 00.86 |
| 1881 | 5,747,847,621 | 00.92 |

Excluding from this statement the tonnage of the Chicago & Northwestern and the Wabash, St. Louis & Pacific Companies for the year 1881, the average freight rate for that year would be as hereinbefore stated, 7.62 mills instead of 0.92 of a cent. Comment upon these figures would seem to be entirely unnecessary. Would any thinking man have believed ten years ago, that in the space of a decade, freight rates could be reduced from one cent and three hundred and seventy-four thousandths per ton per mile, to .617 as shown by the Lake Shore reports as the average of all business, through and local, over its line? Or would any person in 1874, with an average rate then of $0.01.37 per ton per mile, been willing to have hazarded his reputation by the prediction that in 1881 the average rate for all business in this State on the railroads, would not exceed 7.62 mills. That is to say, that one ton of freight could be moved one mile for a trifle over three-fourths of a cent? And is it not a matter of great importance to the people, that a system has been adopted that has aided in bringing about this result, and can gather up and present the facts above detailed for general information. It will be remembered by those at all familiar with the history of transportation in this country, that in 1873 and for some years prior thereto, the question of cheap transportation began to attract very largely the attention of the people. The value of the agricultural products of the west was greatly reduced to the producer in consequence of the comparatively high rates to the seaboard. Corn in Iowa and west of that State was being consumed for fuel, as cheaper than coal, in consequence of the cost of movement of corn to the markets, and of coal to the consumers. A new element came into the political world, and by it legislation was effected, and tested in the highest judicial tribunal in the land, that demonstrated the railroad corporations could be controlled in their rates for freight by the legislative will. And while such legislation was crude, and not well understood by the law-makers, and necessarily repealed or materially amended by the states that adopted it, it cannot now, I think, be

doubted that the final result has been of great value to the people, and to railroad corporations also. The system of Commissioners of the different states has grown up from such legislation, and has resulted in equalizing the railroad tariffs, harmonizing the contending interests, and presenting to the people the entire workings of the railroad system. It has not only done that, but it has acted as arbitrator and adjuster of difficulties between railroad corporations, and also between the private citizens and the corporations, so that much of the causes of litigation that heretofore existed, has been removed.

I do not wish to be understood as claiming that the legislation above referred to or the Commissioner system has in any sense been the immediate cause of this great reduction of rates. It has been simply the stimulating or moving power that produced greater activity on the part of corporations in removing old iron rails and replacing them with new steel, and bringing up the road bed and track, and in adding new and improved machinery and rolling stock, so that the actual cost of movement of freight has been reduced over 50 per cent since 1873, as shown by the table of the Lake Shore & Michigan Southern Railway Co. The great factor in this improvement has been steel rails, which in 1873 brought in our markets $125 per ton, and to-day are in market at $42. In 1872 but very little of this rail was produced in this country. To-day we are the greatest steel-producing nation in the world, and the effect is seen in the great reduction of the cost in putting this material into our railroad tracks, and also in the great reduction in the cost of movement of freight, to the direct benefit of the producer and shipper. But this is not all. The benefits derived from the placing a steel rail on the track are more directly appreciated by passengers on our railroads, in the increased ease and safety of travel, and perhaps it cannot be better illustrated than in the difference that has taken place on one of our own roads, in regard to which about a year since I made an order reducing its rate of speed to twenty miles an hour over portions of its road on which it had the old iron rails. I made the order because I believed it to be an imperative necessity for the protection of travellers upon it, and to-day the old iron is replaced by steel, and passengers can pass over it at sixty miles an hour with perfect safety and comfort.

There has been but one complaint to this office of discrimination within the last year, which upon investigation, was found to be justified, and the cause thereof removed.

## TAXATION.

The total amount of taxable income as reported and determined by this office, under the law providing for the taxation of railroad companies doing business in the State during the year 1881, was $27,334,717.37, an increase upon the amount of the previous year of $3,433,598.03, or 14.6 per cent. The total amount of taxes as computed and reported to the Auditor General was

$575,936.88, an increase over the sum for the preceding year of $54,423.04,—14.4 per cent. The tax as levied averaged $142.11 per mile of road, and 02.11 per cent on the gross receipts as reported.

The following shows the amount of taxes assessed against the railroad companies in this State from and including the year 1877 to and including the year 1881:

| | |
|---|---|
| 1877 | $376,769.31 |
| 1878 | 410,453.00 |
| 1879 | 445,399.80 |
| 1880 | 521,513.34 |
| 1881 | 575,936.88 |

making a total of taxes assessed to railroad companies for five years of $2,330,062.33.

Prior to 1879 the railroads of the State organized under the general law were required to report to the Auditor General their gross earnings for taxation. The Legislature of that year required the computation of the tax to be made upon the reports of the railroad companies made to this office, and since that date the computation has been so made. A question has arisen as to the proper mode of the computation of the tax on railroad corporations organized under the general law, and consolidated with companies in other States, by the authority of that law, and thereafter claiming to act as one corporation. The Chicago & Northwestern corporation, operating a railroad in this State under that corporate name, and a railroad forming a continuous line therewith in the States of Wisconsin and Illinois, under the same corporate name, consolidated under the laws of this State, and under one management, reported what they claimed to be their earnings in the State of Michigan, as well as their gross earnings as an entire corporation, and the average earnings per mile of such corporation. I had the tax computation made upon the average earnings per mile of the entire corporation instead of its reported earnings for Michigan. It increased the amount of tax for that company for the year 1879 about $17,000 over what it would have been, had I made the computation on what it claimed to be its average earnings within the State. The tax was paid by the company without objection or protest. At a session of the Legislature for 1881, a joint resolution was passed requiring the Commissioner to investigate and ascertain whether any railroad company or corporation doing business in this State had failed to pay to the State the taxes properly assessable against it, and if any should have failed to do so, that he compute and report the amount of such deficiency for each year in which it occurred to the Auditor General, who is directed to assess and collect the same according to the provisions of law. It was approved February 4, 1881, and ordered to take immediate effect. In compliance with the provisions of this resolution, I found on examination that this company had since

1873, been reporting to the Auditor General what it claimed to be its earnings in the State of Michigan, and had not reported to him the gross earnings per mile of the entire road of the corporation, and the mileage within the State of Michigan, so that a computation could be made in that office in accordance with the law of 1873, which provides that "when a railroad lies partly within and partly without the State, there shall be paid such proportion of the tax herein imposed as the length of the operated portion of road within the State bears to the whole length of the operated portion thereof," and I found that the difference between the amount it was assessed and had paid, and the amount it should have been assessed, was as follows:

| | Amount that should have been Assessed. | Assessed and Paid. | Deficiency. |
|---|---|---|---|
| 1874 | $38,794.41 | $19,389.00 | $19,404.52 |
| 1875 | 37,040.18 | 12,109.24 | 24,930.94 |
| 1876 | 35,825.72 | 13,067.01 | 22,758.71 |
| 1877 | 34.349.33 | 13,095,62 | 21,253.71 |
| 1878 | 42,592.63 | 15,824.73 | 26,767.90 |
| Making a total deficiency of | | | $115,115.78 |

Which computations were transmitted to the Auditor General in compliance with the requirements of the resolution, and were duly assessed by him. Payment of the same was demanded of the company, which it declined on the grounds that the Chicago & Northwestern Railway Company was not a corporation organized under the general law of the State of Michigan, and did not as such corporation operate a railroad lying partly within and partly without the State, and for the purpose of testing the same declined to pay its full tax for 1880 under the construction given to the law by this office, and paid only that portion of it which it admitted to be due upon the basis of actual earnings within the State, leaving a deficiency of $3,469.57, which it has filed a bill in the circuit court for the county of Ingham, to enjoin from collection by the Auditor General. I claim that there is now due from the company for back taxes, the sum of $118,585.35, with interest thereon.

The company also claim if they were to be assessed for the average gross earnings of the road, then they should be permitted to report the earnings, not only of the corporation proper, but also of the leased lines operated by it belonging to other corporations, and also the earnings of roads of corporations of which it has a controlling interest, and that the average earnings per mile, not only of the roads of the corporation proper, but also of the leased lines and of the proprietary roads, should be the basis upon which the tax should be computed in Michigan. In accordance with that theory, it did not report for 1881 the earnings within the State of Michigan, but blended in one account the earnings of its entire system of railroads, increasing its mileage from $1,227.33 to $3,218.47, and decreasing its average earnings as heretofore stated from $10,423.86 per mile for 1880 to $7,587.69 for 1881, and

thus making the difference of about $31,000 in the amount of revenue due the State, which has been since paid, as hereinbefore stated. My position, briefly, is this: that the railroad referred to in the statute as being a railroad lying partly within and partly without the state is the railroad of a corporation which, though it may be created and brought into being by the laws of different states, if it comes into the state of Michigan and consolidates with a road in this state it is in this state organized under its law, and that the entire road of that corporation, under the same corporate name, controlled by the same management, represented by the same stock and with the same equipment, is the road that lies partly within and partly without the state whose average earnings per mile multiplied by the number of miles in this state furnishes the income from which the tax is to be computed, and that it does not include its proprietary lines or leased roads. If the proprietary line or leased roads are within the state of Michigan they are to be taxed separately and must report separately as distinct organizations; if they are without the state, they still form no part of the corporation proper no more than if within it. Believing this to be the true interpretation of the law, I have adhered to it, and made my order with reference to accounts for the purpose of carrying it out, leaving the question to be finally determined by the courts.

I believe that the system of taxation for railroads prescribed by the general laws of this State is the best that has been adopted by any State or country. It is simple in its character, not open to fraud, readily determined, and in fact is the best mode of fixing the true value of the corporate property. A railroad that earns nothing is of no value, except to take up, and the more it earns the greater its value, and the greater its rate of taxation under our system. It is practically an income tax, which is recognized to be the most just of all systems of taxation, when it does not open the door to fraud or perjury, and does not require a large corps of officers to assess and collect it. The power to prescribe the system of accounts to be used by our railroad corporations, and to investigate the books when necessary, leaves little or no room for irregularities, and the mode of assessment and collection is certain and inexpensive. In short the entire moneys derived from railroads are collected without additional expense to the state. It has then all the equities of the income system of taxation, without the frauds, perjuries, and expenses incident thereto.

Another benefit to be derived from this system of taxation is that the revenue realized from it, is spread equitably over the entire State, reaching every hamlet, every household, and every child within it of age to draw primary school money, as it is applied directly to that object, and has increased the rates of primary school money to each child of proper age to $1.25, while a system of local taxation would take the revenue from the State and from the school fund, and confine it to those localities already receiving the benefits of the railroads. With the questions fully settled and

determined as to the precise nature of the railroad described, as lying partly within and partly without the State and the territory to be covered by its accounts and the returns made to this office, the law as it now stands with reference to taxation would seem to be almost entirely free from objection.

### ACCIDENTS TO PERSONS.

I regret to say that the casualty report for 1881 is the heaviest of any year since the organization of the office. The number of killed and injured is 511. For the previous year it was 272, thus showing an increase of 53.21 per cent. Of this number 140 were killed and 371 wounded. The list is classified as follows:

| | Killed. | Injured. | Total. |
|---|---|---|---|
| Passengers | 12 | 40 | 52 |
| Employés | 61 | 270 | 331 |
| Others | 67 | 61 | 128 |

Of this number 83 are reported as purely accidental, while 428 were the result of direct carelessness or want of proper caution. Of the number of persons other than passengers and employés reported as killed, 55 were either tramps, trespassers, or ride stealers, 28 of whom were on the track intoxicated; 11 were killed at highway crossings; and 1 was a suicide. Of the 61 other than passengers and employés injured but not killed, 51 were tramps or trespassers. The number of passengers killed is one for every 492,448 carried and the same number for every 475,297 miles traveled. The number injured, but not fatally, is one for every 145,234 passengers carried, and one for every 142,589 miles traveled. The number of employés killed was one for every 286; injured, and not killed, one for each 71.

The following table gives, in comprehensive form, a statement of accidents and their causes, the full details of which will be seen by consulting Tables 18 and 19 accompanying this report:

*Accidents and Causes.*

| CAUSES. | Passengers. | Employes. | Others. | Total. | Accidental. | From want of Caution. |
|---|---|---|---|---|---|---|
| Collisions | 5 | 3 | ---------- | 8 | 8 | ---------- |
| Coupling cars | ---------- | 163 | ---------- | 163 | ---------- | 163 |
| Derailments | 21 | 5 | ---------- | 26 | 26 | ---------- |
| Falling from trains | 7 | 43 | 1 | 51 | 15 | 36 |
| Frogs | ---------- | 9 | ---------- | 9 | ---------- | 9 |
| Getting on and off trains | 13 | 24 | 13 | 50 | 5 | 45 |
| Highway crossings | ---------- | 1 | 11 | 12 | 4 | 8 |
| Miscellaneous | 6 | 76 | 15 | 97 | 25 | 72 |
| Overhead obstructions | ---------- | 6 | ---------- | 6 | ---------- | 6 |
| Stealing rides | ---------- | ---------- | 5 | 5 | ---------- | 5 |
| Tramps and trespassers | ---------- | 1 | 83 | 84 | ---------- | 84 |
| Total | 52 | 331 | 128 | 511 | 83 | 428 |

From the above it will be seen that the most prolific cause of injury continues to be the coupling of cars, and doubtless it will so prove until a standard model for freight cars shall be adopted common to all the roads of the country with automatic couplers that will obviate the necessity of train men passing between the cars when making up their trains. Fortunately a large proportion of the injuries reported under that head are comparatively light, but at best the result is deplorable. The number of persons killed and injured in falling from and getting on and off trains will also attract attention. Observation has satisfied me that such accidents are largely the outcome of stupidity or culpable negligence on the part of those so injured, and it is improbable that the number will be diminished so long as people persist in swinging off and on trains while under motion and in crowding upon platforms or other unsafe places in spite of all precautions taken to prevent it. I again call your attention to the large number of people injured while trespassing upon railroad property—16.24 per cent of the entire list. In Europe, where accidents of this class are of rare occurrence, it is made by law a grave misdemeanor to enter upon railroad enclosures not open to the public, punishable with severe penalties, and railway employés of almost every grade are constituted special bailiffs for the arrest of those violating law in that particular. I submit that more stringent provisions than are now in force would be of great benefit in this State by protecting its citizens from the evils of their own thoughtlessness.

FROGS.

It appears from above statement that 9 employés were injured from being caught in a frog. I called the attention of the railroad companies in my last report to the necessity of providing some way of preventing this class of accidents, and urged upon railroad officials the necessity of taking immediate action with regard to it. Some of the companies have already done so, while others have not, and I would recommend that some legislation be adopted making it incumbent upon all. It should not, however, prescribe the precise mode of remedying the evil, as by doing so there is liability of escaping one danger only to incur another. Since my last report my attention has been called to different devices which will prevent the foot being caught without endangering the safety of a passing train. As these devices are patented it would not be wise to prescribe the adoption of any particular one. It would be sufficient to provide that the frog or guard rails should be so blocked or otherwise adjusted as to prevent the foot being caught, leaving each company free to adopt such plan as it sees fit, so long as it accomplishes the desired object.

Eight accidents are reported from collisions, as follows:

CHICAGO & GRAND TRUNK.

March 8.—H. Carman, employé, injured (particulars not reported) at Battle Creek, Michigan.

April 9.—At Imlay City, train of loaded flats became unmanageable and collided with a locomotive, killing Wm. Weers, a lad 16 years of age, who was stealing a ride upon the platform of the van.

June 28.—At Renton, W. O. Connors was injured, no particulars given.

DETROIT, MILWAUKEE & GRAND HAVEN.

October 25.—At Nunica, train of a connecting road obstructed main line with train and failed to give signal. The D., M. & G. H. train ran into it and two passengers were injured.

GRAND RAPIDS & INDIANA.

January 13.—Snow plow following a freight train, struck rear end of same, injuring two passengers.

DETROIT, LANSING & NORTHERN.

September 17.—A gravel train and wild freight came together, the result of carelessness of engineers of both trains in disregarding rules, one employé injured and several cars, with a locomotive, seriously damaged.

MICHIGAN CENTRAL.

December 7.—At Colon, a rear end collision killing John Gillispie who was in charge of horses being shipped on the train.

DERAILMENTS.

There are also reported twenty-six casualties resulting from derailments but confined to two roads—the Chicago & Grand Trunk, and the Michigan Central —and nearly all are the result of two accidents in the case of the former road, and to one in the case of the latter. As is well known, the Chicago & Grand Trunk, formerly the Chicago & Lake Huron, when purchased at receiver's sale by its present owners, was hardly in condition to be operated, and the derailments reported, all occurred upon sections of the old track previous to its replacement with the steel rail which has since been put on to the entire line of that road with the exception of a few miles between Lansing and Flint.

The derailment on the Michigan Central, a serious one, occurred Feb'y 2 at Barron Lake, on the Air Line Division, and was caused by a broken rail; 1 person killed and 11 injured, and was one of those accidents incidental to all roads however excellent their management and great the care taken to prevent them.

Below is a comparative statement of accidents happening upon the roads of Michigan for five years past, commencing with 1877.

| YEARS. | 1877. | 1878. | 1879. | 1880. | 1881. | Total. |
|---|---|---|---|---|---|---|
| Passengers | 28 | 43 | 64 | 26 | 52 | 213 |
| Employes | 125 | 121 | 150 | 173 | 331 | 900 |
| Others | 56 | 74 | 86 | 73 | 128 | 417 |
| From Accidental Causes | 57 | 50 | 78 | 46 | 83 | 314 |
| From carelessness or lack of caution | 152 | 188 | 222 | 226 | 428 | 1,216 |
| Total | 209 | 238 | 300 | 272 | 511 | 1,530 |

Fifteen hundred and thirty persons killed or injured in five years, or an average of over 300 yearly! Surely the number should be reduced.

Since entering upon the discharge of the duties of this office its jurisdiction and powers have been greatly extended by the Legislature, until now it requires the entire time and attention of the Commissioner, and in fact he has been unable to fully meet all the demands made upon him during the last year.

The authority conferred with regard to fencing alone, imposes duties that if fully discharged would employ the entire attention of one man. There are other powers and duties that might be added to the office to the advantage of the public, but to do so would involve the necessity of increased clerical force.

Since the date of my last annual report I have visited every county traversed by railroads within the limits of the two peninsulas forming this State. I have been forcibly impressed with the remarkable development of its resources and the grand strides it is making in the race with sister States for wealth and power. That it is largely indebted to the rapid extension of its railroad systems for the progress it has achieved, must be apparent to all.

I have to acknowledge the prompt coöperation of the railroad managements within the State in carrying into effect the legislative enactments for the regulation of the corporate properties in their charge and also to return my thanks for the courtesy and readiness with which I have been promptly provided with all needed facilities for the discharge of my duties in connection with their respective lines.

I append a statement of the expenses of my office for the year ending September 30, 1882, as also a statement of new corporations formed, reorganizations and amendments of old charters filed with the Secretary of State during the years 1881–2.

Very respectfully yours,

W. B. WILLIAMS,
*Commissioner of Railroads.*

# ORDER RELATIVE TO KEEPING OF ACCOUNTS.

---

OFFICE OF THE COMMISSIONER OF RAILROADS,
LANSING, Mich., June 14, 1882.

To.....

Accounting Officer of the.....R.....Company.

WHEREAS, All railroad companies doing business in the State of Michigan under the general laws thereof are liable to taxation upon their gross receipts, which are determined from the reports of such companies made to this office for the preceding year;

AND WHEREAS, Such law requires that when a railroad lies partly within and partly without the State, the tax shall be determined by the proportionate gross earnings of the operated road lying within the State to the whole length of the operated portion thereof;

AND WHEREAS, Questions have arisen as to the proper construction of the term "the whole length of the operated portion thereof," and accounts have been kept so as to include the gross earnings of leased lines and proprietary roads, or roads of which a railroad company may own the majority of the stock, but which are not parts of the corporation proper, under any law of the State of Michigan;

AND WHEREAS, The taxes upon all railroads organized under the general law are required to be assessed upon the earnings of such roads respectively;

*Now therefore*, Under the authority vested in me by Section 24 of an "Act to provide for the appointment of a Commissioner of Railroads and to define his powers and fix his compensation," as amended by Act 144, Session Laws of 1881, I do hereby order and direct that the accounts of all railroad corporations doing business in this State shall be kept not only in accordance with the system heretofore prescribed by this office, known as the Saratoga system, but that they shall also be so kept in addition thereto as to show under the same system the business of the corporation proper, without regard to that of proprietary lines, so called, or leased roads; and that all such corporations operating such leased roads or proprietary lines in the State of Michigan, or partly within and partly without the State, shall keep the accounts of such leased roads or proprietary lines, as the case may be, separately, under the same system as heretofore prescribed, so that returns may be made to the office of the Commissioner of Railroads of each corporate organization, and the correctness thereof be verified from the accounts so kept. This order will take effect and be in force from and after the first day of January, A. D. 1883.

W. B. WILLIAMS,
*Commissioner of Railroads.*

## OFFICE EXPENSES,

FROM OCTOBER 1, 1881, TO OCTOBER 1, 1882.

| | |
|---|---|
| Blanks and Stationery | $51.48 |
| Postage | 85.00 |
| Printing and Binding | 95.55 |
| Telegraph | 29.41 |
| Express | 101.75 |
| Incidentals | 127.63 |
| Traveling Expenses | 99.45 |
| Total | $590.27 |

# STATEMENT

## OF NEW CORPORATIONS FORMED, OF REORGANIZATIONS, AND AMENDMENTS OF OLD CHARTERS SINCE THE DATE OF THE LAST REPORT FROM THE COMMISSIONER OF RAILROADS.

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### NEW CORPORATIONS.

BAY CITY & MIDLAND RAILROAD COMPANY.
Termini, Bay City and Midland.
Proposed length, 18 miles; capital stock, $150,000.
Articles of association filed May 2, 1882.

BEAR LAKE & EASTERN RAILROAD COMPANY.
Termini, Pierpont and Bear Lake.
Proposed length, 20 miles; capital stock, $250,000.
Articles filed January 24, 1882.

CENTRAL MICHIGAN RAILROAD COMPANY.
Termini, Riverdale and Elm Hall.
Proposed length, two miles; capital stock, $100,000.
Articles filed August 23, 1882.

GRAND RAPIDS TRANSFER & JUNCTION RAILROAD COMPANY.
Termini, City of Grand Rapids.
Belt line, one mile; capital stock, $8,000.
Articles of association filed February 2, 1882.

ITHACA & ALMA RAILROAD COMPANY.
Termini, Ithaca and Alma.
Proposed length, 7½ miles; capital stock, $60,000.
Articles of association filed April 15, 1882.

ONTONAGON, GOGEBIC & WISCONSIN STATE LINE.
Proposed length of line, 70 miles; capital stock, $3,000,000.
Articles of association filed September 14, 1882.

OVID & TRAVERSE BAY RAILROAD COMPANY.
Termini, Ovid and Alma.
Proposed length of line, 28 miles; capital stock, $1,000,000.
Articles of association filed April 26, 1882.

PARIS & PERE MARQUETTE RIVER RAILROAD COMPANY.

Termini, Paris, Mecosta county, and the west line of Sec. 2, T. 16 N., R. 12 W.

Proposed length of line, 12 miles; capital stock, $48,000.

PORT HURON & SOUTHWESTERN RAILWAY COMPANY.

Termini, Port Huron & Almont.

Proposed length of line, 32 miles; capital stock, $160,000.

Articles of association filed January 28, 1882.

STURGIS & INDIANA RAILWAY COMPANY.

Termini, Sturgis and State line.

Proposed length, five miles; capital stock, $50,000.

Articles of association filed April 11, 1882.

WEST BRANCH & MOORESTOWN RAILROAD COMPANY.

Termini, point on West branch of the Muskegon river and Moorestown.

Length of line 12 miles; capital stock, $100,000.

Articles of association filed February 20, 1882.

REÖRGANIZATIONS.

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

Formed by consolidation of the Menominee River Railroad Company, the Escanaba & Lake Superior Railway Company, and the Chicago & Northwestern Railway Company.

Termini and length of line from Menominee Junction to Michigammi river 50 miles. From Sec. 34, T'p 39 N., R. 24 W., to point at the mouth of the Montreal river; proposed length 250 miles. From Marquette to mouth of Menominee river, 125 miles.

Proposed length of consolidated line, 425 miles; consolidated capital stock, aggregate of the three companies as originally incorporated.

Articles of consolidation filed Sept. 19, 1882.

THE CINCINNATI, WABASH & LAKE MICHIGAN RAILROAD COMPANY.

Formed by a consolidation of the Cincinnati, Wabash & Lake Michigan, of Indiana, with the Elkhart, Niles & Lake Michigan Railroad Company, of Michigan. Capital stock, $4,000,000.

Termini, Ohio River and Benton Harbor, Mich.

Articles of consolidation filed August 11, 1882.

AMENDMENTS.

DETROIT, MACKINAC & MARQUETTE RAILROAD COMPANY.

Filed February 27, 1882.

Increasing stock to $6,250,000.

DETROIT UNION RAILROAD, STATION, AND DEPOT COMPANY.
Filed April 19, 1882.
Reducing capital stock from $3,000,000 to $2,000,000.
Filed April 19, 1882.

DETROIT WESTERN TRANSIT & JUNCTION RAILROAD COMPANY.
Changing route.
Filed March 14 and 18, 1882.

ESCANABA & LAKE SUPERIOR RAILWAY COMPANY.
To construct a branch line from point in section 2, T. 41 N., R. 28 W., in Menominee county, to point in section 20, T. 40 N., R. 30 W., in said county, making total length of line 270 miles.
Filed July 5, 1882.

GRAND RAPIDS & INDIANA RAILROAD COMPANY.
Filed December 8, 1881.
Increasing capital stock to $5,000,000.

MENOMINEE RIVER RAILROAD COMPANY.
Filed July 5, 1882.
1. Extending line to Keweenaw Bay, 60 miles.
2. Increasing capital stock to $1,500,000.

THE MICHIGAN AIR LINE RAILWAY COMPANY.
Filed March 29, 1882.
1. Increasing capital stock $1,002,000.
2. Extending line of road from crossing of Detroit, Grand Haven & Milwaukee Railroad to the city of Jackson, 40 miles.

PONTIAC, OXFORD & PORT AUSTIN RAILROAD COMPANY.
Filed October 7, 1881.
1. Increasing capital stock to $1,500,000.
2. Changing northern terminus to Caseville.

PORT HURON & NORTHWESTERN RAILWAY COMPANY.
1. Extending line from Palm's Station to Port Austin.
2. Increasing capital stock $144,000.
Filed October 7, 1882.

SAGINAW VALLEY & ST. LOUIS RAILROAD COMPANY.
Extending line to Grand Rapids and branch line from St. Louis to Mt. Pleasant, and branch from Alma to Ithaca.
Main line extension, 63 miles; branches, 28½ miles.
Filed June 24, 1882.

ST. JOSEPH VALLEY RAILROAD COMPANY.
Filed January 19, 1882.
Increasing capital stock to $300,000.

TOLEDO, ANN ARBOR & GRAND TRUNK RAILWAY COMPANY.

Filed August 14, 1882.

Changing termini to Toledo and Durand.

TOLEDO & SOUTH HAVEN RAILROAD COMPANY.

Filed August 4, 1882.

Changing route so as to run to Hartford instead of Bangor.

SUMMARY OF ABOVE.

| | |
|---|---|
| Miles of new line contemplated | 382½ |
| New issues of capital stock authorized | $7,372,000 |

# TABLES

ACCOMPANYING THE

# TENTH ANNUAL REPORT

OF THE

# COMMISSIONER OF RAILROADS.

COMPILED FROM THE ANNUAL REPORTS OF THE RAILROAD COMPANIES REPORTING TO HIS OFFICE FOR THE YEAR 1881.


1. GENERAL EXHIBIT.
2. CAPITAL STOCK.
3. INDEBTEDNESS.
4. COST.
5. EARNINGS AND INCOME.
6. OPERATING EXPENSES.
7. ANALYSIS OF EARNINGS AND EXPENSES.
8. TRACK AND FENCING.
9. MAINTENANCE OF WAY.
10. BRIDGES, CROSSINGS, AND CATTLE GUARDS.
11. MILEAGE.
12. PASSENGER TRAFFIC.
13. FREIGHT TRAFFIC.
14. TONNAGE AND COMMODITIES CARRIED.
15. EQUIPMENT.
16. STATIONS AND EMPLOYES.
17. TAXES.
18. SUMMARY OF ACCIDENTS.
19. CAUSES OF ACCIDENTS.
20. COMPARATIVE SUMMARY FROM RETURNS OF 1880 AND 1881.
21. COMPARATIVE SUMMARY OF RETURNS FOR THE YEARS 1876 TO 1881, INCLUSIVE.
22. COMPARATIVE STATEMENT OF TOTAL COST OF ROADS AND EQUIPMENT, 1880 AND 1881.
23. COMPARATIVE STATEMENT OF INDEBTEDNESS, STOCK AND DEBT, '80 AND '81.
24. COMPARATIVE STATEMENT OF TRACK MILEAGE, 1880-81.

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## 2.—Capital Stock.

| RAILROADS. | Amount Authorized. | Par Value of Shares. | Amount Issued. | Amount Paid in on Shares not Issued. |
|---|---|---|---|---|
| 1 Canada Southern Bridge | $450,000 00 | $100 00 | $450,000 00 | |
| 2 Chicago & Canada Southern | 10,000,000 00 | 100 00 | 2,667,400 00 | |
| 3 Chicago & Grand Trunk | 6,600,000 00 | 100 00 | 6,600,000 00 | |
| 4 Chicago, Detroit & Canada Grand Trunk Junc. | 1,095,000 00 | 100 00 | 1,095,000 00 | |
| 5 Chicago & Northwestern | Unlimited. | 100 00 | 58,488,861 09 | |
| 6 Menominee River | a | | | |
| 7 Escanaba & Lake Superior | a | | | |
| 8 Chicago, Saginaw & Canada | 4,000,000 00 | 100 00 | 286,000 00 | |
| 9 Chicago & West Michigan R. R. | b | | | |
| 10 Chicago & West Michigan R'y | 6,796,833 33 | 100 00 | 6,796,833 33 | |
| 11 White River | 107,000 00 | 100 00 | 107,000 90 | |
| 12 Detroit, Grand Haven & Milwaukee | 1,500,000 00 | 50 00 | 1,500,000 00 | |
| 13 Detroit, Hillsdale & Southwestern | 1,350,000 00 | 100 00 | 1,344,000 00 | |
| 14 Detroit, Lansing & Northern | 4,410,000 00 | 100 00 | 4,328,900 00 | |
| 15 Saginaw & Grand Rapids | 70,000 00 | 700 00 | 70,000 00 | |
| 16 Detroit, Mackinaw & Marquette | 6,250,000 00 | 100 00 | 6,250,000 00 | |
| 17 Flint & Pere Marquette | 6,500,000 00 | 100 00 | 6,500,000 00 | |
| 18 Manistee | 400,000 00 | 100 00 | 368,605 31 | |
| 19 Saginaw & Clare County | 160,000 00 | 100 00 | 1,035 00 | |
| 20 Saginaw & M't Pleasant | 100,000 00 | 100 00 | 40,501 96 | |
| 21 Fort Wayne & Jackson | 3,000,000 00 | 100 00 | 2,719,579 53 | |
| 22 Grand Haven | b | | | |
| 23 Grand Rapids & Indiana | 5,000,000 00 | 100 00 | 4,985,000 00 | $81 22 |
| 24 Allegan & Southeastern | 1,500,000 00 | 100 00 | 250,700 00 | |
| 25 Grand Rapids, Newaygo & Lake Shore | b | | | |
| 26 Lake Shore & Michigan Southern | 50,000,000 00 | 100 00 | 50,000,000 00 | |
| 27 Detroit, Hillsdale & Southwestern | c | | | |
| 28 Detroit, Monroe & Toledo | 414,100 00 | 100 00 | 414,100 00 | |
| 29 Kalamazoo, Allegan & Grand Rapids | 610,000 00 | 100 00 | 610,000 00 | |
| 30 Kalamazoo & White Pigeon | 230,900 00 | 100 00 | 230,900 00 | |
| 31 Northern Central Michigan | 610,000 00 | 100 00 | 610,000 00 | |
| 32 Marquette, Houghton & Ontonagon | 5,000,000 00 | 100 00 | 4,565,626 67 | |
| 33 Michigan Air Line R'y | 300,000 00 | 100 00 | 300,000 00 | |
| 34 Michigan Central | Unlimited. | 100 00 | 18,738,204 00 | |
| 35 Detroit & Bay City | 2,000,000 00 | 100 00 | 2,000,000 00 | |
| 36 Grand River Valley | 1,000,000 00 | 50 00 | 491,200 00 | |
| 37 Jackson, Lansing & Saginaw | 2,500,000 00 | 100 00 | 1,986,790 00 | |
| 38 Kalamazoo & South Haven | 500,000 00 | 100 00 | 325,400 00 | |
| 39 Michigan Air Line R. R. | 400,000 00 | 50 00 | 344,950 00 | 38,603 00 |
| 40 Michigan Midland & Canada | 400,000 00 | 100 00 | 300,000 00 | |
| 41 Mineral Range | 400,000 00 | 100 00 | 81,500 00 | 34,855 00 |
| 42 Paw Paw | 75,000 00 | 100 00 | 75,000 00 | |
| 43 Port Huron & Northwestern | 604,000 00 | 100 00 | 520,000 00 | 84,000 00 |
| 44 Saginaw Bay & Northwestern | 300,000 00 | 100 00 | 20,000 00 | 54,325 74 |
| 45 Saginaw Valley & St. Louis | 300,000 00 | 100 00 | 255,300 00 | 9,504 01 |
| 46 St. Joseph Valley | 100,000 00 | 100 00 | 53,400 00 | |
| 47 Tawas & Bay County | 160,000 00 | 100 00 | | 4,005 00 |
| 48 Toledo, Ann Arbor & Grand Trunk | 1,900,000 00 | 100 00 | 459,239 51 | |
| 49 Toledo, Canada Southern & Detroit | 2,000,000 00 | 100 00 | 1,947,662 50 | |
| 50 Toledo & South Haven | 100,000 00 | 100 00 | | 51,659 27 |
| 51 Traverse City | 205,000 00 | 100 00 | 205,000 00 | |
| 52 Wabash, St. Louis & Pacific | Unlimited. | 100 00 | 49,954,700 00 | |
| Commercial roads | $129,396,833 33 | | $238,938,388 90 | $277,033 24 |
| **ORE AND FOREST ROADS.** | | | | |
| 1 Buckley & Douglas | $40,000 00 | $100 00 | $13,100 00 | |
| 2 Hecla & Torch Lake | 150,000 00 | 100 00 | 100,000 00 | |
| 3 Hobart & Manistee River | 60,000 00 | 100 00 | 60,000 00 | |
| 4 Lake County | 50,000 00 | 100 00 | | $50,000 00 |
| 5 Lake George & Muskegon River | 100,000 00 | 100 00 | 98,500 00 | |
| 6 Muskegon River & Rose Lake | No report. | | | |
| Ore and forest roads | $400,000 00 | | $271,600 00 | $50,000 00 |
| Total for all roads | $129,796,833 33 | | $239,209,988 90 | $327,033 24 |

a Included with stock account of Chicago & Northwestern R. R.
b Merged into Chicago & West Michigan R'y.
c Leased to Lake Shore & Michigan Southern R'y Co.; stock above.

## 2.—Capital Stock.

| Common Stock. | Preferred Stock. | Amount Paid in as per Books of the Company. | Amount Paid in per Mile of Road. | Number of Stock-holders. | Number of Stock-holders in Michigan. | Amount of Stock held in Michigan. |
|---|---|---|---|---|---|---|
| $450,000 00 | | $450,000 00 | $118,421 05 | 13 | | |
| 2,667,400 00 | | 2,667,400 00 | 39,458 58 | 87 | 2 | $11,500 00 |
| 6,600,000 00 | | 6,600,000 00 | 20,000 00 | 339 | 24 | 115,000 00 |
| 1,095,000 00 | | 1,095,000 00 | 18,443 65 | 26 | 1 | 100 00 |
| 36,338,138 37 | 22,150,722 72 | 58,488,861 09 | 21,416 96 | 1,341 | 3 | 13,200 00 |
| | | | | | | |
| 236,000 00 | | 236,000 00 | 7,526 00 | 8 | 1 | |
| 6,796,833 33 | | 6,796,833 33 | 19,226 05 | 404 | 1 | 10,000 00 |
| 107,000 00 | | 107,000 00 | 8,230 77 | 32 | 1 | 1,000 00 |
| 1,500,000 00 | | 1,500,000 00 | 7,936 51 | 16 | 2 | 1,499,650 00 |
| 1,344,000 00 | | 1,344,000 00 | 20,740 75 | 232 | 9 | 49,400 00 |
| 1,825,600 00 | 2,503,300 00 | 4,328,900 00 | 19,537 30 | 392 | | |
| 70,000 00 | | 70,000 00 | 19,444 44 | | | |
| 6,250,000 00 | | 6,250,000 00 | 31,250 00 | 10 | 10 | 6,250,000 00 |
| | 6,500,000 00 | 6,500,000 00 | 20,458 90 | 736 | 13 | 264,900 00 |
| 368,605 31 | | 368,605 31 | 14,438 00 | 5 | 3 | |
| 1,035 00 | | 1,035 00 | 66 78 | | | |
| 40,501 96 | | 40,501 96 | 2,696 53 | 9 | 8 | |
| 431,747 44 | 2,287,832 09 | 2,719,579 53 | 27,195 79 | 194 | 8 | 192,700 00 |
| | | | | | | |
| 4,985,000 00 | | 4,985,081 22 | 14,992 72 | 767 | 273 | 499,050 00 |
| 250,700 00 | | 250,700 00 | 2,507 00 | 8 | 3 | 300 00 |
| | | | | | | |
| 49,466,500 00 | 533,500 00 | 50,000,000 00 | 57,827 00 | 2,551 | 23 | 67,900 00 |
| | | | | | | |
| 414,100 00 | | 414,100 00 | 6,640 47 | 2 | 1 | 100 00 |
| 610,000 00 | | 610,000 00 | 10,441 00 | 33 | 15 | 210,100 00 |
| 230,900 00 | | 230,900 00 | 6,295 00 | 1 | | |
| 610,000 00 | | 610,000 00 | 9,977 12 | 1 | | |
| 2,306,600 00 | 2,259,026 67 | 4,565,626 67 | 50,443 33 | 180 | 5 | 5,700 00 |
| 300,000 00 | | 300,000 00 | 8,282 85 | 7 | 4 | 2,000 00 |
| 18,738,204 00 | | 18,738,204 00 | 69,383 77 | 2,037 | 13 | 279,900 00 |
| 2,000,000 00 | | 2,000,000 00 | 13,582 34 | | 3 | 30,000 00 |
| 491,200 00 | | 491,200 00 | 5,847 62 | 33 | 28 | 325,850 00 |
| 1,986,790 00 | | 1,986,790 00 | 8,571 14 | 32 | 26 | 17,784 50 |
| 325,400 00 | | 325,400 00 | 8,135 00 | 201 | 198 | 325,100 00 |
| 344,950 00 | | 383,553 00 | 3,343 38 | 3,000 | 3,000 | 352,000 00 |
| 300,000 00 | | 300,000 00 | 20,435 96 | 29 | 4 | 42,000 00 |
| 81,500 00 | | 116,355 00 | 9,308 40 | 27 | 26 | 115,035 00 |
| 75,000 00 | | 75,000 00 | 18,750 00 | 8 | 8 | 75,000 00 |
| 520,000 00 | | 604,000 00 | 4,000 00 | 11 | 11 | 604,000 00 |
| 20,000 00 | | 55,325 74 | 1,500 86 | 7 | 7 | 1,000 00 |
| 255,300 00 | | 264,804 01 | 9,181 17 | 178 | 108 | 58,400 00 |
| 53,400 00 | | 53,400 00 | 5,340 00 | 22 | 22 | 53,400 00 |
| | | 4,005 00 | 174 13 | 10 | | |
| 459,239 51 | | 459,239 51 | 7,528 00 | 12 | 4 | 400 00 |
| 1,547,662 50 | | 1,547,662 50 | 27,701 13 | 64 | | |
| | | 51,659 27 | 5,739 92 | 7 | 7 | |
| 205,000 00 | | 205,000 00 | 8,192 30 | 71 | 69 | 34,500 00 |
| 26,921,590 00 | 23,033,200 00 | 49,954,700 00 | 15,023 97 | | | |
| | | | | | | |
| $179,670,807 42 | $59,267,581 48 | $239,196,422 14 | $20,860 00 | 13,156 | 3,944 | $11,596,964 00 |
| | | | | | | |
| $500 00 | | $500 00 | $62 50 | 7 | 7 | $13,100 00 |
| 100,000 00 | | 100,000 00 | 25,000 00 | 8 | 1 | 100 00 |
| 60,000 00 | | 60,000 00 | 6,439 51 | 7 | 7 | 60,000 00 |
| | | 50,000 00 | 8,333 33 | 6 | 6 | |
| 98,500 00 | | 98,500 00 | 4,954 73 | 6 | 4 | 98,500 00 |
| | | | | | | |
| $259,000 00 | | $309,000 00 | $5,149 00 | 34 | 25 | $171,700 00 |
| $179,929,807 42 | $59,267,581 48 | $239,505,422 14 | $20,890 00 | 13,190 | 3,969 | $11,677,964 00 |

## 4.—Cost.

| | RAILROADS. | Of Road. | Of Road per Mile. | Of Equipment. | Of Equipment per Mile. | Of Road and Equipment. | Of Road and Equipment per Mile. | Proportion of Cost for Michigan. |
|---|---|---|---|---|---|---|---|---|
| 1 | Canada Southern Bridge | [a] | | | | | | |
| 2 | Chicago & Canada Southern | | | | | $5,176,557 58 | $76,576 29 | $4,831,963 90 |
| 3 | Chicago & Grand Trunk | | | | | 15,186,402 41 | 46,019 40 | 10,808,345 00 |
| 4 | Chicago, Detroit & Canada Grand Trunk Junction | | | | | 2,073,984 67 | 34,933 20 | 2,073,984 67 |
| 5 | Chicago & Northwestern | | | | | 127,043,982 62 | 46,519 90 | 10,356,259 85 |
| 6 | Menominee River | [b] | | | | | | |
| 7 | Escanaba & Lake Superior | [b] | | | | | | |
| 8 | Chicago, Saginaw & Canada | $636,830 00 | $16,758 68 | $31,000 00 | $815 79 | 667,830 00 | 17,574 47 | 667,830 00 |
| 9 | Chicago & West Michigan R. R. | [c] | | | | | | |
| 10 | Chicago & West Michigan R'y | 8,037,443 08 | 22,730 33 | 763,499 20 | 2,082 65 | 8,800,942 28 | 24,889 65 | 8,800,942 28 |
| 11 | White River | [d] 122,048 75 | 9,388 36 | | | 122,048 75 | 9,388 36 | 122,048 75 |
| 12 | Detroit, Grand Haven & Milwaukee | 6,030,000 00 | 31,904 76 | 670,000 00 | 3,544 97 | 6,700,000 00 | 35,449 73 | 6,700,000 00 |
| 13 | Detroit, Hillsdale & Southwestern | 1,287,648 59 | 19,871 18 | 72,341 16 | 1,116 37 | 1,359,989 75 | 20,987 50 | 1,359,989 75 |
| 14 | Detroit, Lansing & Northern | 6,926,719 97 | 31,261 98 | 622,975 07 | 2,761 78 | 7,545,695 04 | 34,073 62 | 7,545,695 04 |
| 15 | Saginaw & Grand Rapids | 70,000 00 | 19,444 44 | | | 70,000 00 | 19,444 44 | 70,000 00 |
| 16 | Detroit, Mackinaw & Marquette | | | | | 12,041,892 01 | 79,274 00 | 12,041,892 01 |
| 17 | Flint & Pere Marquette | | | | | 11,361,845 01 | 35,761 68 | 11,361,845 01 |
| 18 | Manistee | [e] 367,069 07 | 14,377 95 | | | 367,069 07 | 14,377 95 | 367,069 07 |
| 19 | Saginaw & Clare County | [e] | | | | 142,316 38 | 9,181 70 | 142,316 38 |
| 20 | Saginaw & M't Pleasant | [e] 110,245 70 | 7,339 93 | 20,384 22 | 1,357 14 | 130,629 92 | 8,697 07 | 130,629 92 |
| 21 | Fort Wayne & Jackson | | | | | 2,719,579 53 | 27,195 79 | 1,251,006 58 |
| 22 | Grand Haven | [c] | | | | | | |
| 23 | Grand Rapids & Indiana | 12,052,295 21 | 36,247 50 | 1,214,721 47 | 3,653 30 | 13,267,016 68 | 39,900 00 | 11,148,274 11 |
| 24 | Allegan & Southeastern | 250,700 00 | 25,070 00 | | | 250,700 00 | 25,070 00 | 250,700 00 |
| 25 | Grand Rapids, Newaygo & Lake Shore | [c] | | | | | | |
| 26 | Lake Shore & Michigan Southern | 66,500,000 00 | 76,890 16 | 2,564,426 37 | 13,713 51 | 82,650,000 00 | 90,603 67 | 16,942,886 29 |
| 27 | Detroit, Hillsdale & Southwestern | | | | | | | |
| 28 | Detroit, Monroe & Toledo | 1,381,600 00 | 22,155 22 | | | 1,381,600 00 | 22,155 22 | 1,196,381 88 |
| 29 | Kalamazoo, Allegan & Grand Rapids | 1,450,000 00 | 24,820 00 | | | 1,450,000 00 | 24,820 00 | 1,450,000 00 |
| 30 | Kalamazoo & White Pigeon | 610,000 00 | 16,630 50 | | | 610,000 00 | 16,630 50 | 610,000 00 |
| 31 | Northern Central Michigan | 1,357,000 00 | 22,195 00 | | | 1,357,000 00 | 22,195 00 | 1,357,000 00 |
| 32 | Marquette, Houghton & Ontonagon | 8,018,483 56 | 88,592 24 | 1,157,399 91 | 12,787 54 | 9,175,883 47 | 101,379 78 | 9,175,883 47 |
| 33 | Michigan Air Line R'y | 449,843 42 | 12,852 67 | 41,000 00 | 1,171 43 | 490,843 42 | 14,024 10 | 490,843 42 |
| 34 | Michigan Central | | | | | 29,480,815 77 | 109,159 91 | 24,124,340 11 |
| 35 | Detroit & Bay City | | | | | 3,541,038 89 | 24,047 80 | 3,541,038 89 |
| 36 | Grand River Valley | | | | | 2,852,596 66 | 33,959 48 | 2,852,596 66 |
| 37 | Jackson, Lansing & Saginaw | | | | | 6,929,286 77 | 29,893 38 | 6,929,286 77 |
| 38 | Kalamazoo & South Haven | | | | | 1,150,335 24 | 28,758 38 | 1,150,335 24 |
| 39 | Michigan Air Line R. R. | | | | | 3,166,759 00 | 27,605 99 | 3,011,623 14 |
| 40 | Michigan Midland & Canada | | | | | 586,342 02 | 39,941 55 | 586,342 02 |
| 41 | Mineral Range | 328,238 86 | 22,259 11 | 70,055 62 | 5,604 45 | 398,294 48 | 31,863 56 | 398,294 48 |
| 42 | Paw Paw | 78,000 00 | 19,500 00 | 1,815 00 | 453 75 | 79,815 00 | 19,953 75 | 79,815 00 |
| 43 | Port Huron & Northwestern | 1,722,172 80 | 11,405 12 | 260,956 56 | 1,728 19 | 1,983,129 36 | 13,133 31 | 1,983,129 36 |
| 44 | Saginaw Bay & Northwestern | 168,884 61 | 5,629 49 | 55,350 54 | 1,845 02 | 224,235 25 | 7,474 51 | 224,235 25 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 45 Saginaw Valley & St. Louis | 594,390 60 | 20,496 23 | 87,037 00 | 2,254 84 | 681,427 60 | 23,497 50 | 681,427 60 |
| 46 St. Joseph Valley | 90,305 09 | 9,030 50 | 8,393 68 | 839 36 | 98,698 77 | 9,869 87 | 98,698 77 |
| 47 Tawas & Bay County | ..... | ..... | ..... | ..... | 102,000 00 | 4,434 78 | 102,000 00 |
| 48 Toledo, Ann Arbor & Grand Trunk | 631,244 84 | 11,167 94 | 13,912 34 | 228 07 | 695,157 18 | 11,396 01 | 638,177 07 |
| 49 Toledo, Canada Southern & Detroit | 3,084,991 03 | 54,859 33 | ..... | ..... | 3,064,991 03 | 54,859 33 | 2,593,200 52 |
| 50 Toledo & South Haven | 45,854 17 | 5,095 00 | 16,573 02 | 1,841 44 | 62,427 19 | 6,936 35 | 62,427 19 |
| 51 Traverse City | ..... | ..... | ..... | ..... | 459,164 54 | 17,660 18 | 459,164 54 |
| 52 Wabash, St. Louis & Pacific | ..... | ..... | ..... | ..... | 119,237,681 17 | 35,363 96 | 2,307,430 79 |
| Commercial roads | $122,432,009 35 | f $45,362 00 | $7,671,841 16 | f $2,842 00 | $486,956,004 51 | $42,647 00 | $173,077,350 78 |
| **ORE AND FOREST ROADS.** | | | | | | | |
| 1 Buckley & Douglas | $31,807 79 | $3,975 97 | $13,811 10 | $1,726 39 | $45,618 89 | $5,702 36 | $45,618 89 |
| 2 Hecla & Torch Lake | ..... | ..... | ..... | ..... | 187,560 93 | 46,865 24 | 187,560 93 |
| 3 Hobart & Manistee River | 55,716 76 | 6,029 95 | 22,000 00 | 2,380 95 | 77,716 76 | 8,410 90 | 77,716 76 |
| 4 Lake County | 34,000 00 | 5,666 66 | 16,000 00 | 2,666 67 | 50,000 00 | 8,333 33 | 50,000 00 |
| 5 Lake George & Muskegon River | 170,076 01 | 8,545 07 | 73,548 59 | 3,800 23 | 243,624 60 | 12,254 76 | 243,624 60 |
| 6 Muskegon River & Rose Lake | No report. | ..... | ..... | ..... | ..... | ..... | ..... |
| Ore and forest roads | $291,600 56 | f $6,758 00 | $125,359 69 | f $2,915 00 | $604,521 18 | $14,059 00 | $604,521 18 |
| Total for all roads | $122,723,609 91 | f $45,757 00 | $7,797,200 85 | f $2,843 00 | $487,560,525 69 | $42,520 00 | $173,682,871 96 |

a Cost included with Toledo, Canada Southern & Detroit.
b Reported with Chicago & Northwestern.
c Merged into the Chicago & West Michigan R'y.
d Reported with Chicago & West Michigan R'y.
e Reported with Flint & Pere Marquette R'y.
f For roads only reporting cost separately.

## 6.—Operating Expenses.

| | RAILROADS. | Maintenance of Way | Maintenance of Motive Power and Cars. | Conducting Transportation. | General Expenses and Taxes. | Total Expenses and Taxes. | Proportion for Michigan. |
|---|---|---|---|---|---|---|---|
| 1 | Canada Southern Bridge | $3,899 84 | $4,595 97 | $11,849 26 | $9,538 42 | $29,883 49 | $25,085 64 |
| 2 | Chicago & Canada Southern | 23,860 03 | 592 66 | 22,430 11 | 8,628 19 | 55,510 99 | 51,815 73 |
| 3 | Chicago & Grand Trunk | 205,259 67 | 176,438 78 | 876,924 04 | 139,642 31 | 1,398,264 80 | 923,926 08 |
| 4 | Chicago, Detroit & Canada Grand Trunk Junction | 90,813 43 | 73,750 37 | 233,152 90 | 29,032 78 | 426,749 48 | 426,749 48 |
| 5 | Chicago & Northwestern | 3,184,233 71 | 1,583,699 38 | 5,824,789 80 | 964,169 34 | 11,556,892 23 | 858,223 11 |
| 6 | Menominee River | a | | | | | |
| 7 | Escanaba & Lake Superior | a | | | | | |
| 8 | Chicago, Saginaw & Canada | 18,388 61 | 3,644 51 | 20,197 37 | 7,744 26 | 49,974 75 | 49,974 75 |
| 9 | Chicago & West Michigan Railroad | b 229,880 76 | 81,570 34 | 212,356 40 | 80,107 16 | 603,914 66 | 603,914 66 |
| 10 | Chicago & West Michigan Railway | c 146,348 22 | 38,265 28 | 95,366 79 | 33,152 25 | 313,132 54 | 313,132 54 |
| 11 | White River | d | | | | | |
| 12 | Detroit, Grand Haven & Milwaukee | 210,016 30 | 134,459 91 | 445,480 88 | 93,651 44 | 883,608 53 | 883,608 53 |
| 13 | Detroit, Hillsdale & Southwestern | e | | | | 51,967 47 | 51,967 47 |
| 14 | Detroit, Lansing & Northern | 333,693 38 | 135,598 38 | 373,184 70 | 91,961 95 | 934,429 41 | 934,429 41 |
| 15 | Saginaw & Grand Rapids | f | | | | | |
| 16 | Detroit, Mackinaw & Marquette | 4,069 23 | 2,032 48 | 10,134 05 | 4,762 27 | 20,998 03 | 20,998 03 |
| 17 | Flint & Pere Marquette | 400,060 38 | 172,594 56 | 573,312 99 | 169,354 26 | 1,315,322 19 | 1,315,322 19 |
| 18 | Manistee | g | | | | | |
| 19 | Saginaw & Clare County | g | | | | | |
| 20 | Saginaw & Mt. Pleasant | g | | | | | |
| 21 | Fort Wayne & Jackson | 63,626 05 | 54,446 80 | 79,838 78 | 32,313 91 | 230,225 54 | 105,903 74 |
| 22 | Grand Haven | b 33,514 57 | 5,636 22 | 15,946 05 | 5,289 15 | 60,335 99 | 60,335 99 |
| 23 | Grand Rapids & Indiana | 557,316 93 | 250,302 31 | 457,905 93 | 112,154 71 | 1,377,679 88 | 1,157,623 07 |
| 24 | Allegan & Southeastern | 3,304 87 | 1,536 12 | 4,562 13 | 192 19 | 9,595 31 | 9,595 31 |
| 25 | Grand Rapids, Newaygo & Lake Shore | b 44,781 83 | 11,879 18 | 17,840 31 | 3,095 60 | 77,596 92 | 77,596 92 |
| 26 | Lake Shore & Michigan Southern | 2,182,509 59 | 1,596,537 47 | 6,220,183 35 | 1,279,198 78 | 11,278,429 19 | 2,187,610 73 |
| 27 | Detroit, Hillsdale & Southwestern | j | | | | | |
| 28 | Detroit, Monroe & Toledo | j | | | | | |
| 29 | Kalamazoo, Allegan & Grand Rapids | j | | | | | |
| 30 | Kalamazoo & White Pigeon | j | | | | | |
| 31 | Northern Central Michigan | j | | | | | |
| 32 | Marquette, Houghton & Ontonagon | 126,316 75 | 69,107 87 | 213,879 47 | 50,578 71 | 459,882 80 | 459,882 80 |
| 33 | Michigan Air Line Railway | 12,475 22 | 4,564 57 | 16,694 78 | 749 79 | 34,484 36 | 34,484 36 |
| 34 | Michigan Central | 1,727,831 39 | 825,196 09 | 3,451,328 57 | 727,739 85 | 6,732,095 90 | 5,926,096 33 |
| 35 | Detroit & Bay City | k | | | | | |
| 36 | Grand River Valley | k | | | | | |
| 37 | Jackson, Lansing & Saginaw | k | | | | | |
| 38 | Kalamazoo & South Haven | k | | | | | |
| 39 | Michigan Air Line Railroad | k | | | | | |
| 40 | Michigan, Midland & Canada | 1,048 68 | 355 30 | 4,636 03 | 518 20 | 6,558 21 | 6,558 21 |
| 41 | Mineral Range | 29,934 66 | 10,230 02 | 27,852 83 | 13,019 36 | 81,036 86 | 81,036 86 |
| 42 | Paw Paw | 1,209 35 | 183 21 | 2,793 53 | 3,405 72 | 7,591 81 | 7,591 81 |
| 43 | Port Huron & Northwestern | 17,040 87 | 4,295 66 | 36,975 62 | 8,272 95 | 66,585 10 | 66,585 10 |
| 44 | Saginaw Bay & Northwestern | 26,841 11 | 33,065 77 | 60,193 38 | 8,792 33 | 118,882 59 | 118,882 59 |
| 45 | Saginaw Valley & St. Louis | 18,031 30 | 3,824 26 | 16,571 58 | 15,722 75 | 54,149 98 | 54,149 89 |
| 46 | St. Joseph Valley | | | 106 00 | 3,919 75 | 4,025 75 | 4,025 75 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 47 Tawas & Bay County | 13,006 60 | [a] | [a] | 2,385 14 | 16,081 74 | 16,081 84 |
| 48 Toledo, Ann Arbor & Grand Trunk | 21,891 93 | 14,358 58 | 53,620 21 | 13,249 00 | 103,119 72 | 94,667 27 |
| 49 Toledo, Canada Southern & Detroit | 65,809 83 | 77,557 05 | 230,855 69 | 130,062 02 | 504,284 59 | 426,680 91 |
| 50 Toledo & South Haven | 619 22 | 89 94 | 1,979 60 | 2,684 25 | 5,373 10 | 5,373 10 |
| 51 Traverse City | 10,302 84 | 1,904 15 | 11,940 34 | 1,959 82 | 26,107 15 | 26,107 15 |
| 52 Wabash, St. Louis & Pacific | 3,038,344 46 | 1,468,640 99 | 4,776,775 10 | 1,887,402 03 | 11,171,162 58 | 87,667 08 |
| Commercial Roads | $12,846,971 00 | $6,830,935 18 | $24,401,658 66 | $5,934,400 64 | [b]$50,065,033 55 | $17,473,064 43 |
| ORE AND FOREST ROADS. | | | | | | |
| 1 Buckley & Douglas | | 388 41 | 2,247 50 | | 2,635 91 | 2,635 91 |
| 2 Hecla & Torch Lake | 10,907 79 | | 56,751 93 | 1,357 59 | 69,017 31 | 69,017 31 |
| 3 Hobart & Manistee River | 18,173 93 | 2,500 00 | 10,650 00 | 595 43 | 31,919 36 | 31,919 36 |
| 4 Lake County | | | 15,714 31 | | 15,714 31 | 15,714 31 |
| 5 Lake George & Muskegon River | 6,406 19 | 4,855 49 | 72,217 66 | 2,875 68 | 86,355 02 | 86,355 02 |
| 6 Muskegon River & Rose Lake | No Report. | | | | | |
| Ore and Forest Roads | $35,487 91 | $7,743 90 | $157,581 40 | $4,828 70 | $205,641 91 | $205,641 91 |
| Total for all Roads | $12,882,459 51 | $6,838,679 08 | $24,559,240 00 | $5,939,229 34 | [b]$50,271,575 46 | $17,679,306 34 |

[a] Included with Chicago & Northwestern Report.
[b] For nine months only.
[c] For three months only.
[d] Included with the Chicago & West Michigan Reports.
[e] To September 18th only.
[f] Included with the Detroit, Lansing & Northern Report.
[g] Included with the Flint and Pere Marquette Report.
[j] Included with the Lake Shore & Michigan Southern Report.
[k] Included with the Michigan Central Report.
[x] Paid by party furnishing rolling stock, cost unknown
[y] Includes Detroit, Hillsdale and Southwestern R. R., not distributed $51,867.47.

## 7.—Analysis of Earn-

| RAILROADS. | No. of Miles Operated. | Earnings. Passenger. | Freight. | Total. | Per Train Passenger. | Freight. |
|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | 4.36 | $8,649 18 | $29,056 04 | $37,705 22 | $0 61.96 | $0 31.32 |
| 2 Chicago & Canada Southern | 67.60 | 19,761 52 | 33,706 01 | 53,467 53 | 1 00.07 | 0 67.50 |
| 3 Chicago & Grand Trunk | 330.50 | 449,493 65 | 1,182,102 06 | 1,631,595 71 | 1 05.20 | 1 16.20 |
| 4 Chicago, Det. & Can. G. T. Junc. | 59.37 | 190,994 90 | 205,213 73 | 396,208 63 | 1 17.50 | 0 75.54 |
| 5 Chicago & Northwestern | 3,218.47 | 5,431,256 38 | 16,250,562 00 | 21,681,818 38 | 1 87.96 | 2 03.44 |
| 6 Menominee River | a | | | | | |
| 7 Escanaba & Lake Superior | a | | | | | |
| 8 Chicago, Saginaw & Canada | 38.00 | 35,931 03 | 64,638 01 | 100,569 04 | 0 82.30 | 2 75.03 |
| 9 Chicago & West Michigan R. R. | b | 252,408 10 | 521,874 38 | 774,282 48 | 0 71.60 | 1 53.10 |
| 10 Chicago & West Michigan R'y | c 366.60 | 124,686 51 | 238,207 14 | 362,893 65 | 1 06.20 | 2 34.40 |
| 11 White River | d | | | | | |
| 12 Detroit, G'd Haven & Milwaukee | 189.00 | 540,983 31 | 652,770 61 | 1,193,753 92 | 1 15 | 1 91 |
| 13 Detroit, Hillsdale & Southwest'n | e 64.80 | 20,106 80 | 29,481 61 | 49,588 41 | | |
| 14 Detroit, Lansing & Northern | 225.57 | 403,252 62 | 959,814 33 | 1,363,066 95 | 1 04 58 | 1 59.43 |
| 15 Saginaw & Grand Rapids | f | | | | | |
| 16 Detroit, Mackinaw & Marquette | 30.00 | 6,590 53 | 19,656 85 | 26,247 38 | | |
| 17 Flint & Pere Marquette | 317.71 | 699,167 43 | 1,157,367 34 | 1,856,534 77 | 1 28.44 | 1 60.87 |
| 18 Manistee | g | | | | | |
| 19 Saginaw & Clare County | g | | | | | |
| 20 Saginaw & M't Pleasant | g | | | | | |
| 21 Fort Wayne & Jackson | 100.00 | 100,414 29 | 187,977 25 | 288,391 54 | 0 79 | 1 40 |
| 22 Grand Haven | b | 34,964 22 | 48,960 26 | 83,924 48 | 0 56 | 1 51 |
| 23 Grand Rapids & Indiana | 455.77 | 678,449 42 | 1,206,818 50 | 1,885,267 92 | 1 23.60 | 1 69.90 |
| 24 Allegan & Southeastern | 11.50 | 3,726 11 | 8,619 45 | 12,345 56 | 0 64 70 | 0 99.80 |
| 25 G'd Rapids, Newaygo & L. Shore | b | 33,961 17 | 68,894 73 | 102,855 90 | 1 53 | 1 60 |
| 26 Lake Shore & Michigan Southern | 1,177.67 | 5,198,241 61 | 12,659,987 24 | 17,858,228 85 | 1 78 | 1 64 |
| 27 Det., Hillsdale & Southwest'n | k | | | | | |
| 28 Detroit, Monroe & Toledo | k | | | | | |
| 29 Kal., Allegan & G'd Rapids | k | | | | | |
| 30 Kalamazoo & White Pigeon | k | | | | | |
| 31 Northern Central Michigan | k | | | | | |
| 32 Marq., Houghton & Ontonagon | 90.51 | 90,497 16 | 790,652 24 | 881,149 40 | 1 05 | 3 72 |
| 33 Michigan Air Line R'y | 35.00 | 17,409 74 | 20,079 82 | 37,489 56 | 1 39.80 | 1 53 |
| 34 Michigan Central | 949.59 | 3,062,779 56 | 5,675,731 00 | 8,738,510 56 | 1 56 | 1 37 |
| 35 Detroit & Bay City | l | | | | | |
| 36 Grand River Valley | l | | | | | |
| 37 Jackson, Lansing & Saginaw | l | | | | | |
| 38 Kalamazoo & South Haven | l | | | | | |
| 39 Michigan Air Line R. R. | l | | | | | |
| 40 Michigan Midland & Canada | 14.68 | 3,834 70 | 1,889 80 | 5,724 50 | 0 19.24 | 0 09.48 |
| 41 Mineral Range | 12.50 | 24,814 23 | 93,142 01 | 117,956 24 | 0 94 | 4 14 |
| 42 Paw Paw | 4.00 | 5,580 82 | 5,933 70 | 11,514 52 | 0 56 | 0 59 |
| 43 Port Huron & Northwestern | 151 00 | 71,407 34 | 63,286 63 | 134,693 97 | 1 00.59 | 1 00.75 |
| 44 Saginaw Bay & Northwestern | 30.00 | 2,206 29 | 154,002 15 | 156,208 44 | 0 05.20 | 2 42 01 |
| 45 Saginaw Valley & St. Louis | 38.60 | 43,733 53 | 54,748 96 | 98,482 49 | 0 90.79 | 2 27.35 |
| 46 St. Joseph Valley | 10.00 | 732 94 | 532 74 | 1,265 68 | | |
| 47 Tawas & Bay County | 23.00 | 2,487 33 | 25,841 96 | 28,329 29 | | 0 72 |
| 48 Toledo, Ann Arbor & G'd Trunk | 61.00 | 29,239 55 | 47,586 19 | 76,825 74 | 0 64.91 | 1 50.16 |
| 49 Toledo, Can. Southern & Detroit | 55 87 | 179,302 86 | 293,289 53 | 472,592 39 | 0 61.86 | 0 85.64 |
| 50 Toledo & South Haven | 9.00 | 3,102 23 | 3,569 31 | 6,671 54 | 0 27.53 | 0 31.67 |
| 51 Traverse City | 26.00 | 18,135 64 | 9,833 93 | 27,969 57 | 0 86.06 | 0 62.60 |
| 52 Wabash, St. Louis & Pacific | 3,525.00 | 3,782,137 01 | 10,685,652 82 | 14,467,789 83 | 0 92 | 1 28 |
| Commercial roads | 11,418.31 | $21,570,439 71 | $53,451,480 33 | $75,021,920 04 | $1 35.51 | $1 59.58 |
| ORE AND FOREST ROADS. | | | | | | |
| 1 Buckley & Douglas | 8.00 | | $5,371 70 | $5,371 70 | | $0 64.72 |
| 2 Hecla & Torch Lake | 4.50 | | 46,748 16 | 46,748 16 | | 1 73.14 |
| 3 Hobart & Manistee River | 9.24 | | 29,771 56 | 29,771 56 | | 0 82.69 |
| 4 Lake County | 6.00 | | 21,714 31 | 21,714 31 | | |
| 5 Lake George & Muskegon River | 19.88 | | 70,319 65 | 70,319 65 | | 1 49 |
| 6 Muskegon River & Rose Lake | No Report | | | | | |
| Ore and forest roads | 47.62 | | $173,925 38 | $173,925 38 | | $1 46.96 |
| Total for all roads | 11,465.93 | $21,570,439 71 | $53,625,405 71 | $75,195,845 42 | $1 35.51 | $1 59.55 |

a Included with report of the C. & N. W. R. R. Co.
b For 9 months only.
c For 3 months only.
d Included with report of the C. & W. M. R'y.
e To September 18 only.
f Included with report of D., L. & N. R. R. Co.
g Included with report of F. & P. M. R. R. Co.
k Included with report of the L. S. & M. S. R. R. Co.
l Included with report of the M. C. R. R. Co.

## ings and Expenses.

| Mile. | | Expenses. | | | | Net per Mile of Road. | | Net Earnings per Train Mile. | Net Deficit per Train Mile. |
|---|---|---|---|---|---|---|---|---|---|
| Total. | Per Mile of Road Operated. | Total. | Per Mile of Road Operated. | Per Train Mile. | Per Cent of Earnings. | Earnings. | Deficit. | | |
| $0 93.28 | $8,647 98 | $29,883 49 | $6,854 00 | $0 78.93 | 79.25 | $1,793 88 | ..... | $0 19.35 | ..... |
| 0 76.90 | 790 94 | 55,510 99 | 821 17 | 0 79.80 | 103.82 | ..... | $50 23 | ..... | $0 02.98 |
| 1 13.30 | 4,812 96 | 1,398,264 80 | 4,124 67 | 0 97.86 | 85.70 | 688 29 | ..... | 0 15.50 | ..... |
| 0 91.25 | 6,678 55 | 426,749 48 | 7,187 96 | 0 98.29 | 117.47 | ..... | 514 41 | ..... | 0 07.04 |
| 1 99.33 | 7,587 69 | 11,556,892 23 | 4,044 41 | 1 06.25 | 53.30 | 3,543 28 | ..... | 0 93.08 | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1 51.05 | 2,670 12 | 49,974 75 | 1,315 12 | 0 74.47 | 49.69 | 1,355 00 | ..... | 0 76.58 | ..... |
| 1 11.70 | 2,958 41 | 603,914 66 | 2,305 89 | 0 87.10 | 77.99 | 650 52 | ..... | 0 24.60 | ..... |
| 1 65.70 | 989 89 | 313,132 54 | 854 14 | 1 43.40 | 86.23 | 135 74 | ..... | 0 21.90 | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1 47 | 6,316 16 | 883,606 53 | 4,675 18 | 1 08.89 | 73.82 | 1,657 78 | ..... | 0 38.61 | ..... |
| ..... | 765 25 | 51,967 47 | 786 53 | ..... | ..... | ..... | 21 28 | ..... | ..... |
| 1 33.02 | 6,042 76 | 934,429 41 | 4,142 52 | 0 95.63 | 67.82 | 1,965 10 | ..... | 0 44.88 | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | 874 91 | 20,998 03 | 669 93 | ..... | 74 | 174 98 | ..... | ..... | ..... |
| 1 46.99 | 5,843 48 | 1,315,322 19 | 4,140 00 | 1 04.14 | 70.85 | 1,794 37 | ..... | 0 42.85 | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 1 11 | 2,883 92 | 230,225 54 | 2,302 25 | 0 87 | 79.82 | 581 67 | ..... | 0 24 | ..... |
| 0 90 | 1,461 41 | 60,335 99 | 1,049 33 | 0 64.60 | 71.89 | 412 08 | ..... | 0 25.40 | ..... |
| 1 49.70 | 5,689 98 | 1,377,679 88 | 4,143 40 | 1 09.40 | 70.99 | 1,695 45 | ..... | 0 44.70 | ..... |
| 0 85.70 | 1,073 53 | 9,595 31 | 834 30 | 0 66.60 | 77 34 | 244 40 | ..... | 0 19.50 | ..... |
| 1 57.50 | 2,251 82 | 77,596 92 | 1,686 88 | 1 19 | 72.98 | 564 94 | ..... | 0 38.50 | ..... |
| 1 68 | 15,164 03 | 11,278,429 19 | 9,576 90 | 1 06 | 62.76 | 5,865 05 | ..... | 0 65 | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 2 96 | 9,735 00 | 459,882 80 | 5,081 02 | 1 54.15 | 51 | 4,653 98 | ..... | 1 31.85 | ..... |
| 0 65.36 | 1,071 13 | 34,484 36 | 985 27 | 0 60.12 | 91.98 | 85 83 | ..... | 0 05.24 | ..... |
| 1 43 | 9,202 40 | 6,732,095 90 | 7,089 48 | 1 10 | 77.04 | 2,112 92 | ..... | 0 33 | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 0 28.72 | 392 00 | 6,558 21 | 446 74 | 0 32.90 | 114.56 | ..... | 56 79 | ..... | 0 04.18 |
| 2 42 | 9,436 50 | 81,036 86 | 6,482 95 | 1 66 | 68 | 2,953 55 | ..... | 0 75 | ..... |
| 1 15 | 2,878 63 | 7,591 81 | 1,897 95 | 0 75.69 | 66 | 980 68 | ..... | 0 39.16 | ..... |
| 1 00.67 | 1,131 88 | 66,585 10 | 559 54 | 0 49.07 | 49.14 | 579 07 | ..... | 0 51.05 | ..... |
| 1 49.02 | 5,206 95 | 118,882 59 | 3,962 70 | 1 12.14 | 76 | 1,244 25 | ..... | 0 37 | ..... |
| 1 36.29 | 2,551 36 | 54,149 89 | 1,402 85 | 0 74.94 | 53.97 | 1,196 60 | ..... | 0 63.65 | ..... |
| ..... | 126 56 | 4,025 75 | 402 57 | ..... | 310 | ..... | 27 60 | ..... | ..... |
| 0 78.60 | 1,231 71 | 16,081 74 | 609 46 | 0 44.67 | 57 | 622 25 | ..... | 0 33.93 | ..... |
| 1 00.01 | 1,259 43 | 103,119 72 | 1,690 48 | 1 34.38 | 134 | ..... | 431 04 | ..... | 0 34 02 |
| 0 74.64 | 8,458 78 | 504,284 59 | 9,026 04 | 0 79.75 | 106.07 | ..... | 567 26 | ..... | 0 07.17 |
| 0 59.20 | 741 28 | 5,373 10 | 597 01 | 0 47.68 | 80 | 144 27 | ..... | 0 11.52 | ..... |
| 0 73.20 | 1,075 75 | 26,107 15 | 1,004 12 | 0 68 | 92.24 | 1,004 12 | ..... | 0 05.08 | ..... |
| 1 16 | 5,511 98 | 11,171,162 58 | 3,359 75 | 0 89 | ..... | 991 46 | ..... | 0 26 | ..... |
| $1 52.50 | $6,570 40 | $50,065,933 95 | $4,384 82 | $1 01.47 | 66.61 | $2,185 58 | ..... | $0 51.03 | ..... |
| $0 64 72 | $671 46 | $2,635 91 | $329 49 | $0 43.81 | 49 | $341 97 | ..... | $0 33 | ..... |
| 1 73.14 | 11,687 04 | 69,017 31 | 17,254 32 | 2 55 | 147 | ..... | $5,567 28 | ..... | 0 81.86 |
| 0 82.69 | 3,222 03 | 31,919 36 | 3,454 47 | 0 88 | 107 | ..... | 232 44 | ..... | 0 05.31 |
| ..... | 5,428 57 | 15,714 31 | 3,928 54 | ..... | 72.41 | 1,500 00 | ..... | ..... | ..... |
| 1.49 | 3,537 25 | 86,355 02 | 4,343 87 | 1 83 | 122 | ..... | 806 56 | ..... | 0 34 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| $1 46.96 | $3,652 36 | $205,641 91 | $4,318 39 | $1 74.01 | 118 | ..... | $666 03 | ..... | $0 27.05 |
| $1 52.04 | $6,558 19 | $50,271,575 86 | $4,384 43 | $1 01.64 | 66.85 | $2,173 76 | ..... | $0 50.40 | ..... |

## 8.—Track and

| RAILROADS. | Road Owned, Miles. | Road Operated Miles. | TRACK. Main Line. | Branches. | In Michigan. | Double Track. |
|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | a 3.80 | 4.36 | 3.66 | .14 | 3.66 | ..... |
| 2 Chicago & Canada Southern | 67.60 | 67.60 | 67.60 | ..... | 63.10 | ..... |
| 3 Chicago & Grand Trunk | 330.50 | 330.50 | 330.50 | ..... | 224.00 | ..... |
| 4 Chicago, Detroit & Can. G. T. Junc | 59.37 | 59.37 | 59.37 | ..... | 59.37 | ..... |
| 5 Chicago & Northwestern | y 487.51<br>2,730.96 | 3,218.47 | 3,218.47 | ..... | 217.92 | ..... |
| 6 Menominee River | b ..... | ..... | ..... | ..... | ..... | ..... |
| 7 Escanaba & Lake Superior | b ..... | ..... | ..... | ..... | ..... | ..... |
| 8 Chicago, Saginaw & Canada | 38.00 | 38.00 | 38.00 | ..... | 38.00 | ..... |
| 9 Chicago & West Michigan R. R. | c ..... | ..... | ..... | ..... | ..... | ..... |
| 10 Chicago & West Michigan R'y | 353.60 | 366.60 | 169.50 | 197.10 | 366.60 | ..... |
| 11 White River | d 13.00 | ..... | ..... | ..... | ..... | ..... |
| 12 Detroit, Gr'd Haven & Milwaukee | 189.00 | 189.00 | 189.00 | ..... | 189.00 | ..... |
| 13 Detroit, Hillsdale & Southwest'rn | 64.80 | 64.80 | 64.80 | ..... | 64.80 | ..... |
| 14 Detroit, Lansing & Northern | 221.57 | 225.57 | 156.60 | 64.97 | 221.57 | ..... |
| 15 Saginaw & Grand Rapids | e 3.60 | ..... | 3.60 | ..... | 3.60 | ..... |
| 16 Detroit, Mackinaw & Marquette | 151.90 | x 30.00 | 151.90 | ..... | 151.90 | ..... |
| 17 Flint & Pere Marquette | 322.81 | x 317.71 | 253.31 | 69.50 | 322.81 | ..... |
| 18 Manistee | 25.53 | ..... | 25.53 | ..... | 25.53 | ..... |
| 19 Saginaw & Clare County | f ..... | ..... | ..... | ..... | ..... | ..... |
| 20 Saginaw & M't Pleasant | f ..... | ..... | ..... | ..... | ..... | ..... |
| 21 Fort Wayne & Jackson | 100.00 | 100.00 | 100.00 | ..... | 46.00 | ..... |
| 22 Grand Haven | c ..... | ..... | ..... | ..... | ..... | ..... |
| 23 Grand Rapids & Indiana | 532.50 | 455.77 | 332.50 | ..... | 279.39 | ..... |
| 24 Allegan & Southeastern | 11.50 | ..... | 11.50 | ..... | 11.50 | ..... |
| 25 Grand Rapids, Newaygo & L. S. | c ..... | ..... | ..... | ..... | ..... | ..... |
| 26 Lake Shore & Michigan Southern | 864.87 | 1,177.67 | 540.49 | 324.38 | 193.02 | 219.13 |
| 27 Det., Hillsdale & Southwestern | ..... | ..... | ..... | ..... | ..... | ..... |
| 28 Detroit, Monroe & Toledo | 62.36 | ..... | 62.36 | ..... | 54.67 | ..... |
| 29 Kalamazoo, Allegan & G. Rap. | 58.42 | ..... | 58.42 | ..... | 58.42 | ..... |
| 30 Kalamazoo & White Pigeon | 36.57 | ..... | 36.57 | ..... | 36.57 | ..... |
| 31 Northern Central Michigan | 61.14 | ..... | 61.14 | ..... | 61.14 | ..... |
| 32 Marquette, Houghton & Ontonag'n | 90.51 | 90.51 | 63.18 | 27.33 | 90.51 | ..... |
| 33 Michigan Air Line R'y | 35.00 | 35.00 | 35.00 | ..... | 35.00 | ..... |
| 34 Michigan Central | 270.07 | 949.59 | 270.07 | ..... | 221.00 | 89.00 |
| 35 Detroit & Bay City | 147.25 | ..... | 109.00 | 38.25 | 147.25 | ..... |
| 36 Grand River Valley | 84.00 | ..... | 84.00 | ..... | 84.00 | ..... |
| 37 Jackson, Lansing & Saginaw | 294.80 | ..... | 294.80 | ..... | 294.80 | ..... |
| 38 Kalamazoo & South Haven | 40.00 | ..... | 40.00 | ..... | 40.00 | ..... |
| 39 Michigan Air Line R. R. | 114.72 | ..... | 114.72 | ..... | 109.10 | ..... |
| 40 Michigan Midland and Canada | 14.68 | 14.68 | 14.68 | ..... | 14.68 | ..... |
| 41 Mineral Range | 12.50 | 12.50 | 12.50 | ..... | 12.50 | ..... |
| 42 Paw Paw | 4.00 | 4.00 | 4.00 | ..... | 4.00 | ..... |
| 43 Port Huron & Northwestern | 151.00 | 151.00 | 151.00 | ..... | 151.00 | ..... |
| 44 Saginaw Bay & Northwestern | 30.00 | 30.00 | 30.00 | ..... | 30.00 | ..... |
| 45 Saginaw Valley & St. Louis | 29.00 | 38.60 | 29.00 | ..... | 29.00 | ..... |
| 46 St Joseph Valley | 10.00 | 10.00 | 10.00 | ..... | 10.00 | ..... |
| 47 Tawas & Bay County | 23.00 | 23.00 | 23.00 | ..... | 23.00 | ..... |
| 48 Toledo, Ann Arbor & Grand Trunk | 61.00 | 61.00 | 61.00 | ..... | 56.00 | ..... |
| 49 Toledo, Canada South'rn & Detroit | 55.87 | 55.87 | 55.87 | ..... | 47.27 | ..... |
| 50 Toledo & South Haven | 9.00 | 9.00 | 9.00 | ..... | 9.00 | ..... |
| 51 Traverse City | 26.00 | 26.00 | 26.00 | ..... | 26.00 | ..... |
| 52 Wabash, St. Louis & Pacific | 3,325.00 | 3,325.00 | 3,325.00 | ..... | 78.28 | ..... |
| Commercial roads | 11,418.31 | 11,481.17 | 10,696.64 | 721.67 | 4,204.96 | 338.13 |
| ORE AND FOREST ROADS. | | | | | | |
| 1 Buckley & Douglas | 8.00 | 8.00 | 8.00 | ..... | 8.00 | ..... |
| 2 Hecla & Torch Lake | 4.50 | 4.50 | 4.50 | ..... | 4.50 | ..... |
| 3 Hobart & Manistee River | 9.24 | 9.24 | 9.24 | ..... | 9.24 | ..... |
| 4 Lake County | 6.00 | 6.00 | 6.00 | ..... | 6.00 | ..... |
| 5 Lake George & Muskegon River | 19.88 | 19.88 | 11.13 | 8.75 | 19.88 | ..... |
| 6 Muskegon River & Rose Lake | No report. | ..... | ..... | ..... | ..... | ..... |
| Ore and forest roads | 47.62 | 47.62 | 38.87 | 8.75 | 47.62 | ..... |
| Total for all roads | 11,465.93 | 11,528.79 | 10,735.51 | 730.42 | 4,252.58 | 338.13 |

a 0.56 miles is bridge.
b Track included with Chicago & Northwestern statement.
c Track forms portion of Chicago & West Michigan Railway.
d Operated by Chicago & West Michigan Railway Company.

# Fencing.

| Track. | | | | | Fencing. | | | |
|---|---|---|---|---|---|---|---|---|
| Sidings. | Computed as Single Track. | Steel Rail. | Iron Rail. | Gauge. | Miles Built. | Cost. | Built or Renewed during Year. | Required Miles. |
| 11.54 | 15.34 | 3.66 | 11.68 | 4 feet, 8½ in. | 3.66 | | | |
| 3.97 | 71.57 | 40 93 | 30.64 | 4 " 8½ " | 141 91 | $54,493 44 | 0.83 | |
| 43.85 | 374 35 | 232.50 | 141.85 | 4 " 8½ " | 372.00 | 89,282 00 | 40 00 | 84.00 |
| 16.71 | 76.08 | 60.13 | 15.95 | 4 " 8½ " | 118 74 | 59,644 69 | 12.57 | |
| 440.19 | 3,658.66 | 2,167.32 | 1,491.34 | 3 ft, and 4 ft, 8½ in | 101.30 | 35,488 00 | 31 30 | 291.50 |
| | | | | | | | | |
| 3.29 | 41 29 | | 41.29 | 4 feet, 8½ in | 36.00 | 4,352 00 | 14.00 | 16.00 |
| 63.20 | 416.80 | 110.90 | 305.90 | 4 " 8½ " | | | | 149.52 |
| | 13 00 | | 13.00 | 4 " 8½ " | | | | |
| 49.99 | 236.99 | 187 00 | 51.99 | 4 " 8½ " | 385 00 | 123,200 00 | 2 00 | |
| 3.40 | 68.20 | | 68.20 | 4 " 8½ " | 120.00 | | | 9 60 |
| 46.63 | 268 20 | 137.00 | 131.20 | 4 " 8½ " | 221.59 | | 103 13 | |
| | 3.60 | | 3.60 | 4 " 8½ " | | | | |
| 13.50 | 165.40 | 127.00 | 38.40 | 4 " 8½ " | 10 75 | 3,336 77 | | 152.05 |
| 111.29 | 434.10 | 283.44 | 150.66 | 3 ft, and 4 ft. 8½ in | 457.38 | 45,738 00 | 17.36 | 112 50 |
| | 25.53 | 25.53 | | 4 feet, 8½ in. | | | | |
| | | | | | | | | |
| 10.30 | 110.30 | 46.00 | 64 30 | 4 " 8½ " | 92 00 | 36,800 00 | 3.00 | |
| 59.51 | 392.01 | 152 64 | 239.37 | 4 " 8½ " | 345.25 | | 14.25 | 195.95 |
| 1.28 | 12.78 | | 12 78 | 4 " 8½ " | 23 00 | | | |
| 465.80 | 1,579.80 | 1,237 74 | 342.06 | 4 " 8½ " | 709.00 | 281,248 00 | 11.81 | |
| 18 94 | 81.30 | 56.22 | 25.08 | 4 " 8½ " | 103 00 | 36,256 00 | 2 26 | |
| 9.55 | 67.97 | 6 96 | 61.01 | 4 " 8½ " | 116.00 | 40,832 00 | .09 | |
| 4 90 | 41.47 | 4 95 | 36.52 | 4 " 8½ " | 78.00 | 25,696 00 | .06 | |
| 6.00 | 67.14 | .20 | 66.94 | 4 " 8½ " | 121 00 | 42,592 00 | 4.98 | |
| 25 37 | 115.88 | 30.19 | 85.69 | 4 " 8½ " | 26.20 | 8,384 00 | | 50 00 |
| 2.90 | 37 90 | | 37.90 | 4 " 8½ " | 60.00 | 19,200 00 | | 8.00 |
| 187.18 | 546.25 | 359.07 | 187 18 | 4 " 8½ " | 442 00 | 141,440 00 | 105.95 | |
| 17.12 | 164 37 | 72 32 | 92.05 | 4 " 8½ " | 286.50 | 114,600 00 | 43 86 | 4.80 |
| 9.37 | 93.37 | 53.53 | 39.84 | 4 " 8½ " | 168.00 | 53,760 00 | 25 10 | |
| 45.97 | 340.77 | 174.92 | 165 85 | 4 " 8½ " | 262 98 | 32,947 20 | 67.34 | 355.02 |
| 3.36 | 43.36 | | 43.36 | 4 " 8½ " | 80.00 | 25,600 00 | 12 40 | |
| 12.80 | 127.52 | 103.60 | 23 92 | 4 " 8½ " | 217.00 | 83,828 00 | 76.33 | |
| .81 | 15.49 | | 15.49 | 4 " 8½ " | 28.00 | 8,064 00 | | |
| 1.83 | 14.33 | 1 90 | 12.43 | 3 " | | | | 25 00 |
| .25 | 4.25 | | 4.25 | 3 " | 8.00 | 2,560 00 | | |
| 8.14 | 159.14 | | 159.14 | 3 " | 170.82 | 34,194 72 | 112.82 | 113 38 |
| 6.50 | 36.50 | | 36.50 | 4 " 8½ " | | | | 20.00 |
| 2.80 | 31.80 | | 31.80 | 4 " 8½ " | 48.00 | | 19.00 | 10.00 |
| .13 | 10.13 | | 10.13 | 3 " | | | | 16.00 |
| 4.00 | 27.00 | | 27.00 | 3 " 2 " | | | | |
| 2.60 | 63.60 | | 63.60 | 4 " 8½ " | 79 00 | 16,684 80 | 8.00 | 33.00 |
| 21.71 | 77.56 | 55 87 | 21 71 | 4 " 8½ " | 71.98 | | | |
| .40 | 9.40 | | 9 40 | 3 " | 17.00 | 3,264 00 | | |
| .76 | 26.76 | | 26.76 | 4 " 8½ " | 1 00 | | .25 | 51.00 |
| | | | | | 155.20 | | | |
| 1,737 84 | 10,169.28 | 5,731.52 | 4,437.76 | | 5,672.24 | $1,423,485 62 | 728.69 | 1,677.32 |
| .50 | 8 50 | | 8 50 | 3 feet | | | | |
| .50 | 5.00 | 4 75 | .25 | 4 " 1 in. | | | | |
| 3.76 | 13.00 | | 13.00 | 3 " | | | | |
| .25 | 6 25 | 4.00 | 2.25 | 4 " 8½ " | | | | |
| 1 17 | 20.05 | 3 00 | 17 05 | | | | | 39.76 |
| | | | | | | | | |
| 6.18 | 52.80 | 11.75 | 41.05 | | | | | 39.76 |
| 1,744.02 | 10 222.08 | 5,743.27 | 4,478 81 | | 5,672.24 | $1,423,485 62 | | 1,717.08 |

[e] Operated by Detroit, Lansing & Northern R. R Co.
[f] Operated by Flint & P. M. Co., and track included in statement of that Co.
[x] Average miles operated during year.
[y] Road leased in perpetuity.

## 9.—Maintenance

| RAILROADS. | No. of Track Sections in Mich. | Average Length of Sections in Mich. | Average No. of Men to Section. | No. of New Ties Placed in Whole Line during the Year. | No. of New Ties Placed in Michigan during the Year | Average No. of New Ties Placed Per Mile. | New Rails Placed in Track during the Year. Tons. | New Rails Placed in Track during the Year. Miles. |
|---|---|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | 1 | 3 | 11 | 1,464 | 1,464 | 400 | | |
| 2 Chicago & Canada Southern | 8 | 7.85 | 3 | 19,981 | 19,751 | 300 | 6.49 | 0.69 |
| 3 Chicago & Grand Trunk | 45 | 5 | 5 | 155,704 | 100,000 | 471 | 7,335 | 73.50 |
| 4 Chi., Det. & Can Gr. Trunk Junc. | 13 | 4.49 | 5 2-10 | 23,306 | 23,306 | 392 | 309.50 | 3.03 |
| 5 Chicago & Northwestern | 33 | 6.08 | 6 | 1,614,329 | 381,851 | 402 | | 182.67 |
| 6 Menominee River | a | | | | | | | |
| 7 Escanaba & Lake Superior | a | | | | | | | |
| 8 Chicago, Saginaw & Canada | 6 | 6 | 5 | 10,000 | 10,000 | 263 | | |
| 9 Chicago & West Michigan Railroad | c | | | | | | | |
| 10 Chicago & West Michigan Railway | 68 | 5.04 | 5 | 149,238 | 149,238 | 422 | 364.15 | 4.63 |
| 11 White River | c | | | | | | | |
| 12 Detroit, Grand Haven & Milwaukee | 37 | 5.01 | 4 | 90,128 | 90,128 | 397 | 900 | 10.22 |
| 13 Detroit, Hillsdale & Southwestern | 10 | 6.50 | 3 | | | | | |
| 14 Detroit, Lansing & Northern | 48 | 4.60 | 5 | 60,000 | 60,000 | 270 | 1,357 | 18. |
| 15 Saginaw & Grand Rapids | d | | | | | | | |
| 16 Detroit, Mackinaw & Marquette | | | | | | | | |
| 17 Flint & Pere Marquette | 68 | 5 | 4 | 191,863 | 191,863 | 634 | 4,000 | 45.45 |
| 18 Manistee | c | | | | | | | |
| 19 Saginaw & Clare County | c | | | | | | | |
| 20 Saginaw & Mt. Pleasant | c | | | | | | | |
| 21 Fort Wayne & Jackson | 9 | 5.02 | 4 | 24,390 | 11,219 | 244 | 600 | 7 |
| 22 Grand Haven | c | | | | | | | |
| 23 Grand Rapids and Indiana | 61 | 4.07 | 5 | 96,336 | 90,140 | 290 | | 54.89 |
| 24 Allegan & Southeastern | 1 | 11.05 | 4 | 5,000 | 5,000 | 434 | | |
| 25 Grand Rapids, Newaygo & L. Shore | c | | | | | | | |
| 26 Lake Shore & Michigan Southern | 74 | 5.45 | 4¼ | 777,855 | 160,502 | 681 | 12,903 | 126.57 |
| 27 Det., Hillsdale & Southwestern | | | | | | | | |
| 28 Detroit, Monroe & Toledo | 9 | 6.08 | 5 4-10 | 28,697 | 26,854 | 460 | 1,009.09 | 11.63 |
| 29 Kalamazoo, Allegan & G. Rapids | 13 | 4.05 | 3 9-10 | 25,747 | 25,747 | 440 | 628.50 | 6.93 |
| 30 Kalamazoo & White Pigeon | 8 | 4.06 | 3 9-10 | 16,222 | 16,222 | 443 | 400.50 | 4.41 |
| 31 Northern Central Michigan | 11 | 5.05 | 3 6-10 | 16,244 | 16,244 | 265 | 14 | 0.15 |
| 32 Marquette, Houghton & Ontonagon | 22 | 4.01 | 5 | 36,223 | 36,223 | 312 | ,774 | 8.02 |
| 33 Michigan Air Line Railway | 7 | 5 | 4 | 7,905 | 7,905 | 439 | | |
| 34 Michigan Central | 60 | 3.07 | 3½ | 240,120 | 198,510 | 890 | 8,250 | 87.07 |
| 35 Detroit & Bay City | 28 | 5.28 | 3½ | 7,650 | 7,650 | 52 | 1,411 | 15.73 |
| 36 Grand River Valley | 20 | 4.19 | 3 | 30,115 | 30,115 | 360 | 809 | 8.58 |
| 37 Jackson, Lansing & Saginaw | 66 | 4.05 | 3 | 97,715 | 97,715 | 420 | 6,252 | 62.30 |
| 38 Kalamazoo & South Haven | 8 | 5 | 2 | 10,250 | 10,250 | 260 | | |
| 39 Michigan Air Line Railroad | 22 | 5.02 | 3 | 36,405 | 34,625 | 318 | 94 | 1 |
| 40 Michigan, Midland & Canada | 1 | 14.68 | 3 | 2,500 | 2,500 | 170 | | |
| 41 Mineral Range | 3 | 4 | 4 | 13,078 | 13,078 | 1,057 | 173 | 2.61 |
| 42 Paw Paw | 1 | 4 | 2 | 544 | 544 | | | |
| 43 Port Huron & Northwestern | 17 | 7 | 4 | | | | | |
| 44 Saginaw Bay and Northwestern | 5 | 5 | 4 | | | | | |
| 45 Saginaw Valley & St. Louis | 8 | 4 | 2¼ | 13,577 | 13,577 | 468 | | |
| 46 St. Joseph Valley | 1 | 10 | 10 | | | | | |
| 47 Tawas & Bay County | 4 | 6 | 7 | 1,000 | 1,000 | 43 | 44 | 1.33 |
| 48 Toledo, Ann Arbor & Grand Trunk | 11 | 5 | 3 | 12,333 | 9,333 | 202 | 117 | 1.05 |
| 49 Toledo, Canada Southern & Detroit | 8 | 5.87 | 4 | 22,378 | 20,671 | 437 | | |
| 50 Toledo & South Haven | 1 | 9 | 3 | | | | | |
| 51 Traverse City | 4 | 6.05 | 4 | 15,444 | 15,444 | 594 | | |
| 52 Wabash, St. Louis & Pacific | 15 | 5 | 4 | 2,700 | 2,700 | 35 | | |
| Commercial Roads | 835 | 5.03 | ----- | 3,856,440 | 1,881,369 | 447 | 48,249.19 | 737.46 |
| ORE AND FOREST ROADS | | | | | | | | |
| 1 Buckley & Douglas | 1 | 8 | | | | | | |
| 2 Hecla & Torch Lake | 1 | 7.50 | 6 | 3,000 | 3,000 | 600 | 20 | 0.25 |
| 3 Hobert & Manistee River | | | | | | | | |
| 4 Lake County | | | | | | | | |
| 5 Lake George & Muskegon River | 5 | 4 | 4 | 4,600 | 4,600 | 253 | | |
| 6 Muskegon River & Rose Lake | No | Report. | | | | | | |
| Ore and Forest Roads | 7 | 6.80 | ------ | 7,600 | 7,600 | 158 | | |
| Total for all Roads | 842 | 5.05 | ------ | 3,864,040 | 1,888,969 | 444 | 48,269.19 | 737.71 |

a Included in Chicago & Northwestern Report.
c Included with the Chicago & West Michigan Railway Report.

of Way.

| Number of Cattle Guards Renewed. | Feet of Timber (Board Measure) Used in Renewal of Bridges during the Year. | Trestle Work Replaced with Earth during Year, Ft. | Timber Culverts Replaced with Stone, No. | Timber Culverts Replaced with Iron Pipe, No. | Timber Culverts Replaced with Sewer Pipe, No. | Timber Culverts Renewed, No. | Bridges Renewed During the Year. Wood. No. | Wood. Feet. | Iron and Stone. No. | Iron and Stone. Feet. | Combination. No. | Combination. Feet. | Total Feet. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 135 | 492,200 | 705 | | | | 54 | | | | | | | |
| 30 | 60,334 | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | |
| 16 | 61,897 | 199 | 3 | 7 | | | | | 1 | 146 | | | 146 |
| 60 | 361,807 | 2,419 | | 9 | 30 | | | | 3 | 568 | | | 568 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 211,142 | | | | 5 | 49 | 3 | 334 | | | | | 334 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 19 | 25,264 | | | | | 26 | | | | | | | |
| 80 | 348,878 | 423 | | | 10 | | | | | | 3 | 385 | 385 |
| | 6,272 | | | | | | | | | | | | |
| 99 | | 3,871 | 3 | | | 14 | 1 | 100 | 3 | 421 | | | 521 |
| 14 | | | | | | | | | | | | | |
| 23 | | | | | | 1 | | | | | | | |
| 16 | | | | | | 3 | | | | | | | |
| 5 | | | | | | 4 | | | | | | | |
| | 53,920 | | | | | | 2 | 350 | | | | | 350 |
| | 410,393 | 780 | 1 | | | 16 | | | 3 | 294 | | | 294 |
| 16 | | | | | | | | | | | | | |
| 20 | 97,230 | | | | | 7 | | | | | | | |
| 42 | 256,628 | | | | | 11 | | | | | | | |
| 10 | 49,303 | | | | | | | | | | | | |
| 30 | 408,158 | 130 | 6 | | | 7 | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | 1 | 86 | | | | | 86 |
| 5 | 5,531 | | | | | 6 | 11 | 1,900 | 1 | 140 | | | 2,040 |
| | 27,205 | | | | | | 1 | 150 | | | | | 150 |
| | 26,000 | 5,280 | | | | | 1 | 200 | | | | | 200 |
| 11 | 28,653 | | | | | 9 | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 666 | 2,919,710 | 13,307 | 13 | 16 | 45 | 207 | 20 | 3,120 | 11 | 1,569 | 3 | 385 | 5,074 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 666 | 2,919,710 | 13,307 | 13 | 16 | 45 | 207 | 20 | 3,120 | 11 | 1,569 | 3 | 385 | 5,074 |

[a] Included in Report of the Flint & Pere Marquette Railway.
[d] Operated by the Detroit, Lansing & Northern Railroad Co.

## 10.—Bridges, Crossings, Culverts, and Cattle-Guards.

| | RAILROADS. | Bridges. Wooden. Number. | Bridges. Wooden. Av. Length, ft. | Bridges. Stone or Iron. Number. | Bridges. Stone or Iron. Av. Length, ft. | Bridges. Combination. Number. | Bridges. Combination. Av. Length, ft. | Bridges. Wooden Trestles. Number. | Bridges. Wooden Trestles. Av. Length, ft. | Crossings. Railroad. At Grade. | Crossings. Railroad. Over or Under Grade. | Crossings. Highways. Without Gates or Flagmen. | Crossings. Highways. With Gates or Flagmen. | Crossings. Highways. Over Railroad. | Crossings. Highways. Under Railroad. | Crossings. Highways. Eighteen feet above Track. | Crossings. Highways. Less than 18 ft. above Track. | Crossings. Highways. Total Number. | Culverts in Mich., No. | Cattle-Guards in Mich., No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Canada Southern Bridge | 2 | 2,628 | ---- | ---- | ---- | ---- | 5 | 1,080 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2 | Chicago & Canada Southern | 5 | 876 | ---- | ---- | ---- | ---- | 1 | 59 | 4 | ---- | 92 | ---- | 2 | ---- | 2 | ---- | 94 | 114 | 30 |
| 3 | Chicago & Grand Trunk | 85 | 7,790 | ---- | ---- | ---- | ---- | 41 | 4,156 | 12 | ---- | 263 | 3 | 5 | 4 | 3 | 2 | 275 | 234 | 520 |
| 4 | Chicago, Detroit & Canada G'd Trunk Junction | ---- | ---- | 6 | 924 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 76 | 170 |
| 5 | Chicago & Northwestern | 7 | 1,660 | ---- | ---- | 2 | 352 | 87 | 11,630 | 1 | 1 | 30 | 3 | ---- | ---- | ---- | ---- | 33 | 244 | 31 |
| 6 | Menominee River | a---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 7 | Escanaba & Lake Superior | a---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 8 | Chicago, Saginaw & Canada | 8 | 800 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 9 | Chicago & West Michigan R. R. | c---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 10 | Chicago & West Michigan R'y | 218 | 3,300 | ---- | ---- | ---- | ---- | ---- | ---- | 5 | ---- | 377 | 1 | 9 | 11 | 4 | 5 | 398 | 474 | 511 |
| 11 | White River | c---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 12 | Detroit, Grand Haven & Milwaukee | 1 | 90 | 10 | 2,268 | ---- | ---- | 38 | 3,606 | 9 | ---- | 247 | 18 | 10 | 13 | 7 | 3 | 288 | 462 | 418 |
| 13 | Detroit, Hillsdale & Southwestern | 25 | 3,096 | ---- | ---- | ---- | ---- | ---- | ---- | 2 | 1 | 85 | ---- | 1 | 1 | 1 | ---- | 87 | ---- | ---- |
| 14 | Detroit, Lansing & Northern | 36 | 2,850 | 13 | 1,708 | ---- | ---- | 28 | 2,170 | 8 | ---- | 223 | 1 | 7 | 6 | 7 | ---- | 237 | 338 | 463 |
| 15 | Saginaw & Grand Rapids | d---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16 | Detroit, Mackinaw & Marquette | 9 | 725 | ---- | ---- | ---- | ---- | 28 | 6,065 | ---- | ---- | 16 | ---- | ---- | ---- | ---- | ---- | 16 | ---- | 12 |
| 17 | Flint & Pere Marquette | 23 | 2,454 | ---- | ---- | 6 | 560 | 86 | 16,021 | 7 | 5 | 378 | 7 | 2 | 6 | ---- | 2 | 393 | 338 | 478 |
| 18 | Manistee | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 19 | Saginaw & Clare County | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20 | Saginaw & M't Pleasant | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 21 | Fort Wayne & Jackson | 13 | 840 | ---- | ---- | ---- | ---- | ---- | ---- | 3 | ---- | 54 | ---- | ---- | ---- | ---- | ---- | 54 | 67 | 37 |
| 22 | Grand Haven | c---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 23 | Grand Rapids & Indiana | ---- | ---- | ---- | ---- | 9 | 1,725 | 182 | 16,363 | 14 | ---- | 275 | 6 | 3 | 3 | 3 | ---- | 287 | 177 | 297 |
| 24 | Allegan & Southeastern | ---- | ---- | ---- | ---- | ---- | ---- | 2 | 370 | 2 | ---- | 10 | ---- | ---- | ---- | ---- | ---- | 10 | 23 | 20 |
| 25 | Grand Rapids, Newaygo & Lake Shore | c---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 26 | Lake Shore & Michigan Southern | 18 | 2,576 | 2 | 59 | 1 | 305 | 26 | 3,426 | 10 | ---- | 580 | 27 | 4 | 3 | 4 | ---- | 614 | 466 | 1,169 |
| 27 | Detroit, Hillsdale & Southwestern | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 28 | Detroit, Monroe & Toledo | 8 | 1,008 | ---- | ---- | ---- | ---- | 8 | 658 | 3 | ---- | 103 | 19 | 3 | ---- | ---- | 3 | 125 | 76 | 155 |
| 29 | Kalamazoo, Allegan & Grand Rapids | 1 | 180 | ---- | ---- | 1 | 305 | ---- | ---- | 5 | ---- | 69 | 2 | ---- | 1 | ---- | ---- | 72 | 52 | 142 |
| 30 | Kalamazoo & White Pigeon | 1 | 234 | ---- | ---- | ---- | ---- | 1 | 185 | 3 | ---- | 49 | 1 | 1 | ---- | 1 | ---- | 51 | 37 | 95 |
| 31 | Northern Central Michigan | 4 | 432 | ---- | ---- | ---- | ---- | 3 | 236 | 4 | ---- | 81 | 1 | 1 | ---- | ---- | 1 | 86 | 73 | 147 |
| 32 | Marquette, Houghton & Ontonagon | 39 | 2,812 | 1 | 51 | ---- | ---- | 5 | 2,737 | 1 | 1 | 31 | 4 | 2 | 2 | 2 | ---- | 39 | 202 | 10 |
| 33 | Michigan Air Line R'y | 18 | 1,215 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 39 | ---- | ---- | ---- | ---- | ---- | 39 | 52 | 73 |
| 34 | Michigan Central | 29 | 1,310 | 19 | 2,609 | ---- | ---- | 6 | 1,150 | 7 | ---- | 237 | 19 | 26 | 6 | 19 | 7 | 288 | 362 | 660 |
| 35 | Detroit & Bay City | 62 | 5,635 | 2 | 411 | ---- | ---- | 4 | 1,411 | 10 | ---- | 174 | 4 | 8 | 4 | 7 | 1 | 190 | 175 | 295 |
| 36 | Grand River Valley | 11 | 1,793 | ---- | ---- | ---- | ---- | 15 | 1,050 | 2 | ---- | 98 | ---- | ---- | ---- | ---- | ---- | 98 | 110 | 147 |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 Jackson, Lansing & Saginaw | 96 | | | | | | | | | | | | | | | | | | |
| 38 Kalamazoo & South Haven | 1 | 6,151 | 2 | 150 | | | 3 | 273 | 4 | | 234 | 5 | 2 | | 2 | | 261 | 594 | 521 |
| 39 Michigan Air Line R. R. | 37 | 131 | | | | | 6 | 242 | 1 | | 45 | | 1 | | 1 | | 46 | 74 | 103 |
| 40 Michigan Midland & Canada | | 2,190 | 1 | 30 | | | 25 | 1,727 | 6 | | 124 | | 3 | 4 | 3 | | 131 | 85 | 295 |
| 41 Mineral Range | 3 | | | | | | 15 | 600 | | | 18 | | | | | | 18 | | |
| 42 Paw Paw | 1 | 147 | | | | | 3 | 183 | 1 | | 8 | | | 1 | | | 9 | | |
| 43 Port Huron & Northwestern | 20 | 110 | | | | | | | | | | | | | | | | 2 | 6 |
| 44 Saginaw Bay & Northwestern | | 2,912 | 1 | 140 | | | | | 3 | | 186 | | | | | | 186 | 410 | 189 |
| 45 Saginaw Valley & St. Louis | 4 | 435 | | | | | 2 | 1,500 | 1 | | 4 | | | | | | 4 | | |
| 46 St. Joseph Valley | | | | | | | | | | | 31 | | | | | | 31 | 11 | 68 |
| 47 Tawas & Bay County | 5 | 1,500 | | | | | 13 | 1,644 | | | 11 | | | | | | 11 | 30 | 27 |
| 48 Toledo, Ann Arbor & Grand Trunk | | 1,279 | | | | | | | | | 15 | | | | | | 15 | | |
| 49 Toledo, Canada Southern & Detroit | 4 | 445 | 3 | 578 | | | | 820 | 4 | 1 | 12 | | 1 | | 1 | | 13 | 77 | 90 |
| 50 Toledo & South Haven | 2 | 160 | | | | | 65 | 9,535 | 2 | | 58 | 1 | | | | | 59 | | |
| 51 Traverse City | 2 | 105 | | | | | | | | | 9 | | | | | | 9 | 2 | 24 |
| 52 Wabash, St. Louis & Pacific | | | | | 5 | 486 | 10 | 525 | | | | | | | | | | 22 | 6 |
| | | | | | | | 29 | 3,823 | 5 | | 117 | | | 1 | | | 118 | 189 | 249 |
| Commercial Roads | 798 | 59,869 | 60 | 8,928 | 24 | 2,733 | 735 | 93,245 | 141 | 9 | 4,409 | 122 | 91 | 66 | 67 | 24 | 4,688 | 5,618 | 7,464 |
| ORE AND FOREST ROADS. | | | | | | | | | | | | | | | | | | | |
| 1 Buckley & Douglas | | | | | | | | | | | | | | | | | | | |
| 2 Hecla & Torch Lake | | | | | | | 1 | 390 | 1 | | 4 | | | | | | 4 | 1 | 4 |
| 3 Hobart & Manistee River | | | | | | | 2 | 685 | | | 1 | | | | | | 1 | | |
| 4 Lake County | 2 | 650 | | | | | | | 1 | | 1 | | | | | | 1 | | |
| 5 Lake George & Muskegon River | 18 | 14,300 | | | | | 1 | 2,600 | | | 20 | | | | | | 20 | | |
| 6 Muskegon River & Rose Lake | No | Report | | | | | | | | | | | | | | | | | |
| Ore and Forest Roads | 20 | 14,950 | | | | | 4 | 3,585 | 2 | | 26 | | | | | | 26 | 1 | 4 |
| Total for all Roads | 818 | 74,819 | 60 | 8,928 | 24 | 2,733 | 739 | 96,830 | 143 | 9 | 4,435 | 122 | 91 | 66 | 67 | 24 | 4,714 | 5,649 | 7,468 |

[a] Included in Report of Chicago & Northwestern R. R. Co.
[c] Included in Report of the Chicago & West Michigan R'y.
[d] Operated by Detroit, Lansing & Northern R. R.

## 11.—Train Mileage.

| | RAILROADS. | Passenger. | Freight. | Total Earning Revenue. | Work Trains. | Switching. | Total Mileage. |
|---|---|---|---|---|---|---|---|
| 1 | Canada Southern Bridge | 13,961 | 26,460 | 40,421 | | | 40,421 |
| 2 | Chicago & Canada Southern | 19,616 | 49,836 | 69,502 | 5,488 | 48 | 75,038 |
| 3 | Chicago & Grand Trunk | 423,307 | 1,015,723 | 1,439,030 | 210,698 | 528,927 | 2,178,655 |
| 4 | Chicago, Detroit & Canada Grand Trunk Junction | 162,534 | 271,650 | 434,184 | 21,968 | 313,374 | 769,526 |
| 5 | Chicago & Northwestern | 2,889,563 | 7,987,775 | 10,877,338 | 736,597 | 3,428,001 | 15,041,936 |
| 6 | Menominee River | a | | | | | |
| 7 | Escanaba & Lake Superior | a | | | | | |
| 8 | Chicago, Saginaw & Canada | 43,632 | 23,475 | 67,107 | 5,600 | | 72,707 |
| 9 | Chicago & West Michigan R. R. | b | | | | | |
| 10 | Chicago & West Michigan R'y | 469,490 | 442,405 | 911,895 | 45,855 | | 957,750 |
| 11 | White River | b | | | | | |
| 12 | Detroit, Grand Haven & Milwaukee | 470,056 | 341,429 | 811,485 | 53,036 | 175,287 | 1,039,808 |
| 13 | Detroit, Hillsdale & Southwestern | | | | | | |
| 14 | Detroit, Lansing & Northern | 385,571 | 602,036 | 987,607 | 106,395 | 191,634 | 1,285,636 |
| 15 | Saginaw & Grand Rapids | c | | | | | |
| 16 | Detroit, Mackinaw & Marquette | | | | | | |
| 17 | **Flint & Pere Marquette** | 543,566 | 719,438 | 1,263,004 | 164,710 | 519,060 | 1,946,774 |
| 18 | **Manistee** | d | | | | | |
| 19 | **Saginaw & Clare county** | d | | | | | |
| 20 | Saginaw & M't Pleasant | d | | | | | |
| 21 | Fort Wayne & Jackson | 126,872 | 133,622 | 260,494 | 4,612 | 1,665 | 266,771 |
| 22 | Grand Haven | x 62,053 | 31,293 | 93,346 | | | 93,346 |
| 23 | Grand Rapids & Indiana | 549,052 | 710,208 | 1,259,260 | 90,913 | 225,183 | 1,575,356 |
| 24 | Allegan & Southeastern | 5,759 | 8,639 | 14,398 | | | 14,398 |
| 25 | Grand Rapids, Newaygo & Lake Shore | x 22,200 | 43,078 | 65,278 | | | 65,278 |
| 26 | Lake Shore & Michigan Southern | 2,910,400 | 7,704,600 | 10,615,000 | 528,900 | 4,090,000 | 15,233,900 |
| 27 | Detroit, Hillsdale & Southwestern | e | | | | | |
| 28 | Detroit, Monroe & Toledo | e | | | | | |
| 29 | Kalamazoo, Allegan & Grand Rapids | e | | | | | |
| 30 | Kalamazoo & White Pigeon | e | | | | | |
| 31 | Northern Central Michigan | e | | | | | |
| 32 | Marquette, Houghton & Ontongon | 85,863 | 212,605 | 298,468 | 25,431 | 155,391 | 479,290 |
| 33 | Michigan Air Line R'y | 44,294 | 13,062 | 57,356 | 5,423 | 1,431 | 64,210 |
| 34 | Michigan Central | 1,964,673 | 4,133,875 | 6,103,548 | 89,373 | 2,227,073 | 8,419,994 |
| 35 | Detroit & Bay City | f | | | | | |
| 36 | Grand River Valley | f | | | | | |
| 37 | Jackson, Lansing & Saginaw | f | | | | | |
| 38 | Kalamazoo & South Haven | f | | | | | |
| 39 | Michigan Air Line R. R | f | | | | | |
| 40 | Michigan Midland & Canada | 7,992 | 11,938 | 19,930 | | | 19,930 |
| 41 | **Mineral Range** | | 48,722 | 48,722 | 1,681 | | 50,403 |
| 42 | **Paw Paw** | 4,006 | 6,010 | 10,016 | | | 10,016 |
| 43 | **Port Huron & Northwestern** | 70,986 | 62,811 | 133,797 | | | 133,797 |
| 44 | **Saginaw Bay & Northwestern** | 42,402 | 63,604 | 106,006 | 7,436 | | 113,442 |
| 45 | **Saginaw Valley & St. Louis** | 48,172 | 24,086 | 72,258 | | 309 | 72,567 |
| 46 | **St. Joseph Valley** | | | | | | |
| 47 | **Tawas & Bay County** | | 36,000 | 36,000 | 1,200 | 2,548 | 39,748 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 48 Toledo, Ann Arbor & Grand Trunk | 45,046 | 31,639 | 76,735 | | | 76,735 |
| 49 Toledo, Canada Southern & Detroit | 289,852 | 342,443 | 632,295 | | | 632,295 |
| 50 Toledo & South Haven | 4,506 | 6,762 | 11,268 | | | 11,268 |
| 51 Traverse City | 22,492 | 15,706 | 38,198 | 198 | 3,312 | 41,708 |
| 52 Wabash, St. Louis & Pacific | [g] 4,115,329 | 8,368,303 | 12,483,632 | 3,033,810 | | 15,517,442 |
| Commercial roads, miles | 15,843,245 | 33,494,333 | 49,337,578 | 5,139,324 | 11,863,243 | 66,340,145 |
| ORE AND FOREST ROADS. | | | | | | |
| 1 Buckley & Douglas | | 8,300 | 8,300 | | | 8,300 |
| 2 Hecla & Torch Lake | | 27,000 | 27,000 | | | 27,000 |
| 3 Hobart & Manistee River | | 36,000 | 36,000 | | | 36,000 |
| 4 Lake County | | | | | | |
| 5 Lake George & Muskegon River | | 47,049 | 47,049 | 1,500 | | 48,549 |
| 6 Muskegon River & Rose Lake | No Report. | | | | | |
| Ore and forest roads, miles | | 118,349 | 118,349 | 1,500 | | 119,849 |
| Total for all roads, miles | 15,843,245 | 33,612,682 | 49,455,927 | 5,140,824 | 11,863,243 | 66,459,994 |

[a] Included in Report of Chicago & Northwestern R. R. Co.
[b] Reported by Chicago & West Michigan R'y Co.
[c] Operated by Detroit, Lansing & Northern R. R. Co., Lessee.
[d] Reported by the Flint & Pere Marquette R'y Co.
[e] Reported by the Lake Shore & Michigan Southern R. R. Co.
[f] Reported by the Michigan Central R. R. Co.
[g] Report covers entire system for the year.
[x] For nine months only.

12.—Passen-

| RAILROADS. | Through Passengers. No. | Local Passengers. No. | Total Passengers. No. | Total Passengers Carried One Mile. No. |
|---|---|---|---|---|
| 1 Canada Southern Bridge | | | 113,250 | 493.770 |
| 2 Chicago & Canada Southern | | | | |
| 3 Chicago & Grand Trunk | 104,379 | 215,043 | 319,422 | 28,600,744 |
| 4 Chicago, Detroit & Canada Grand Trunk Junction | 98,064 | 103,159 | 201,223 | 8,913,292 |
| 5 Chicago & Northwestern | | | 5,195,536 | 190,158,648 |
| 6 Menominee River | a | | | |
| 7 Escanaba & Lake Superior | a | | | |
| 8 Chicago, Saginaw & Canada | 5,624 | 77,699 | 83,323 | 1,047,828 |
| 9 Chicago & West Michigan R. R. | b | | | |
| 10 Chicago & West Michigan R'y | 88,747 | 453,233 | 541,980 | 13,970,292 |
| 11 White River | b | | | |
| 12 Detroit, Grand Haven & Milwaukee | 11,948 | 519,807 | 531,755 | 19,116,093 |
| 13 Detroit, Hillsdale & Southwestern | | | | |
| 14 Detroit, Lansing & Northern | | | 555,725 | 13,741,232 |
| 15 Saginaw & Grand Rapids | d | | | |
| 16 Detroit, Mackinaw & Marquette | | | | |
| 17 Flint & Pere Marquette | 892 | 812,239 | 813,131 | 24,449,195 |
| 18 Manistee | e | | | |
| 19 Saginaw & Clare County | e | | | |
| 20 Saginaw & M't Pleasant | e | | | |
| 21 Fort Wayne & Jackson | 12,561 | 92,385 | 104,946 | 3,275,747 |
| 22 Grand Haven | b | | | |
| 23 Grand Rapids & Indiana | 45,740 | 688,573 | 734,313 | 24,661,483 |
| 24 Allegan & Southeastern | 807 | 11,328 | 12,135 | 135,558 |
| 25 Grand Rapids, Newaygo & Lake Shore | b | | | |
| 26 Lake Shore & Michigan Southern | 122,155 | 3,559,851 | 3,682,006 | 207,953,215 |
| 27 Detroit, Hillsdale & Southwestern | f | | | |
| 28 Detroit, Monroe & Toledo | f | | | |
| 29 Kalamazoo, Allegan & Grand Rapids | f | | | |
| 30 Kalamazoo & White Pigeon | f | | | |
| 31 Northern Central Michigan | f | | | |
| 32 Marquette, Houghton & Ontonagon | 10,656 | 114,688 | 125,344 | 2,033,885 |
| 33 Michigan Air Line R'y | 1,175 | 36,713 | 37,888 | 511,019 |
| 34 Michigan Central | 245,154 | 1,834,135 | 2,079,289 | 135,706,148 |
| 35 Detroit & Bay City | g | | | |
| 36 Grand River Valley | g | | | |
| 37 Jackson Lansing & Saginaw | g | | | |
| 38 Kalamazoo & South Haven | g | | | |
| 39 Michigan Air Line R. R. | g | | | |
| 40 Michigan Midland & Canada | | 8,554 | 8,554 | 111,202 |
| 41 Mineral Range | | 45,449 | 45,449 | 495,516 |
| 42 Paw Paw | | 17,066 | 17,066 | 68,284 |
| 43 Port Huron & Northwestern | | 80,938 | 80,938 | 2,239,914 |
| 44 Saginaw Bay & Northwestern | | | | |
| 45 Saginaw Valley & St. Louis | | 67,938 | 67,938 | 1,389,836 |
| 46 St. Joseph Valley | | | | |
| 47 Tawas & Bay County | | 6,909 | 6,909 | 82,911 |
| 48 Toledo, Ann Arbor & Grand Trunk | 7,979 | 34,902 | 42,881 | 910,553 |
| 49 Toledo, Canada Southern & Detroit | | | 262,050 | 6,239,200 |
| 50 Toledo & South Haven | 9,674 | | 9,674 | 87,066 |
| 51 Traverse City | 4,275 | 22,733 | 27,008 | 545,992 |
| 52 Wabash, St. Louis & Pacific | | | 3,215,200 | 137,114,727 |
| Total | 769,830 | 8,803,342 | 18,914,933 | 824,103,330 |

a Included with Chicago & Northwestern Report.
b Included with Chicago & West Michigan Report.
d Operated by Detroit, Lansing & Northern R. R. Co.
e Reported by the Flint & Pere Marquette R. R. Co.
f Reported by the Lake Shore & Michigan Southern R. R. Co.
g Reported by the Michigan Central R. R. Co.

ger Traffic.

| Average Distance Traveled by each Passenger. Miles. | Average Fare Received from each Passenger. | Highest Rate of Fare Per Mile for any Distance. | Lowest Rate of Fare per Mile for any Distance. | Average Rate per Mile for through Passengers. | Average Rate per Mile for Local Passengers. | Average Rate per Mile for all Passengers. |
|---|---|---|---|---|---|---|
| 4.36 | $0 10 | ---------- | $0 02.29 | $0 02.29 | $0 02.29 | $0 02.29 |
| 90 | 1 28 | $0 03 | 0 00.40 | 0 01.20 | 0 02.30 | 0 01.40 |
| 44.30 | 0 87 | 0 03 | 0 01 52 | 0 01.60 | 0 02.74 | 0 01.96 |
| 37.15 | 0 90 | 0 04 | 0 00.92 | ---------- | ---------- | 0 02 46 |
| 12.56 | 0 40 | 0 05 | 0 01.50 | 0 02.75 | 0 03 40 | 0 02.84 |
| 25.77 | 0 74 | 0 04 | 0 03 | ---------- | ---------- | 0 02.90 |
| 35 95 | 0 93 | 0 03 | 0 00.75 | 0 01.723 | 0 02.713 | 0 02.65 |
| 24.73 | 0 66 | 0 04 | 0 01.50 | ---------- | ---------- | 0 02.69 |
| 30 | 0 80 | 0 05 | 0 01.148 | 0 01.150 | 0 02.694 | 0 02.68 |
| 31.20 | 0 86 | 0 03 | 0 01 50 | 0 02 50 | 0 03 | 0 02.75 |
| 33.58 | 0 86 | 0 03 | 0 00.06 | 0 02 354 | 0 02.637 | 0 02.586 |
| 11 17 | 0 30 | 0 03 | 0 02 | 0 02.485 | 0 02.751 | 0 02.752 |
| 56.50 | 1 12 | 0 05 | 0 01 | 0 01.220 | 0 02 345 | 0 01.985 |
| 16.22 | 0 66 | 0 05 | 0 03 | 0 04 | 0 04 | 0 04.07 |
| 13.49 | 0 40 | 0 04 | 0 01 | 0 02.88 | 0 03.02 | 0 03.01 |
| 65.27 | 1 35 | 0 03 | 0 00.53 | 0 01.54 | 0 02.63 | 0 02.07 |
| 13 | 0 40 | 0 05 | 0 02 | ---------- | ---------- | 0 03.11 |
| 10.90 | 0 53 | 0 05 | 0 02.50 | ---------- | 0 04 84 | 0 04.84 |
| 4 | 0 25 | 0 06.25 | 0 06.25 | ---------- | ---------- | 0 06.25 |
| 27.67 | 0 77 | 0 05 | 0 02 | ---------- | 0 02.08 | 0 02.08 |
| | | 0 03 | 0 03 | ---------- | ---------- | 0 03 |
| 20.46 | 0 60 | 0 04 | 0 01.50 | ---------- | ---------- | 0 02.96 |
| | | 0 04 | 0 03 | ---------- | 0 03.50 | 0 03.50 |
| 12 | 0 36 | 0 03.50 | 0 03 | ---------- | 0 03.25 | 0 03.25 |
| 21.23 | 0 57 | 0 03 | 0 00.55 | 0 02.38 | 0 02.90 | 0 02.70 |
| 24 | 0 60 | 0 05 | 0 00.50 | 0 01.50 | 0 02.40 | 0 01.85 |
| 8 | 0 30 | 0 03.75 | 0 03.75 | ---------- | ---------- | 0 03.75 |
| 20.22 | 0 56 | 0 03 | 0 00.60 | 0 02.694 | 0 02.791 | 0 02.773 |
| 42 50 | 0 95 | 0 03 | 0 01.50 | 0 02 | 0 02.75 | 0 02.238 |
| 43 57 | 0 98 | ---------- | ---------- | ---------- | ---------- | 0 02.288 |

## 13.—Freight

| RAILROADS. | No. of Tons of Through Freight Carried. | Total Mileage of Through Freight. | No. of Tons of Local Freight Carried. | Total Mileage of Local Freight. |
|---|---|---|---|---|
| 1 Canada Southern Bridge | | | | |
| 2 Chicago & Canada Southern | | | 56,225 | 1,110,955 |
| 3 Chicago & Grand Trunk | 705,964 | 210,516,277 | 172,861 | 18,117,792 |
| 4 Chicago, Detroit & Canada Grand Trunk Junction | 654,071 | 59,054,532 | 74,011 | 2,258,228 |
| 5 Chicago & Northwestern | | | | |
| 6 Menominee River | a | | | |
| 7 Escanaba & Lake Superior | a | | | |
| 8 Chicago, Saginaw & Canada | 42,623 | | 26,413 | |
| 9 Chicago & West Michigan R. R. | b | | | |
| 10 Chicago & West Michigan R'y | | | | |
| 11 White River | b | | | |
| 12 Detroit, Grand Haven & Milwaukee | 188,237 | 26,112,591 | 350,973 | 24,806,608 |
| 13 Detroit, Hillsdale & Southwestern | | | | |
| 14 Detroit, Lansing & Northern | | | | |
| 15 Saginaw & Grand Rapids | c | | | |
| 16 Detroit, Mackinaw & Marquette | | | | |
| 17 Flint & Pere Marquette | 10,906 | 2,055,227 | 1,003,059 | 78,838,825 |
| 18 Manistee | d | | | |
| 19 Saginaw & Clare County | d | | | |
| 20 Saginaw & M't Pleasant | d | | | |
| 21 Fort Wayne & Jackson | 119,297 | 8,490,781 | 79,531 | 3,303,359 |
| 22 Grand Haven | b | | | |
| 23 Grand Rapids & Indiana | 478,548 | 70,033,911 | 134,062 | 9,292,562 |
| 24 Allegan & Southeastern | 26,575 | 304,292 | 3,180 | 21,520 |
| 25 Grand Rapids, Newaygo & Lake Shore | b | | | |
| 26 Lake Shore & Michigan Southern | 1,299,302 | 699,024,476 | 7,865,206 | 1,322,728,383 |
| 27 Detroit, Hillsdale & Southwestern | e | | | |
| 28 Detroit, Monroe & Toledo | e | | | |
| 29 Kalamazoo, Allegan & Grand Rapids | e | | | |
| 30 Kalamazoo & White Pigeon | e | | | |
| 31 Northern Central Michigan | e | | | |
| 32 Marquette, Houghton & Ontonagon | 68,102 | 1,603,954 | 851,937 | 21,873,579 |
| 33 Michigan Air Line R'y | 4,580 | 164,885 | 17,833 | 230,143 |
| 34 Michigan Central | 2,066,177 | 564,700,430 | 2,130,719 | 225,322,500 |
| 35 Detroit & Bay City | f | | | |
| 36 Grand River Valley | f | | | |
| 37 Jackson, Lansing & Saginaw | f | | | |
| 38 Kalamazoo & South Haven | f | | | |
| 39 Michigan Air Line R. R. | f | | | |
| 40 Michigan Midland & Canada | | | | |
| 41 Mineral Range | | | 188,047 | 2,101,900 |
| 42 Paw Paw | | | | |
| 43 Port Huron & Northwestern | | | 40,624 | 2,234,365 |
| 44 Saginaw Bay & Northwestern | | | | |
| 45 Saginaw Valley & St. Louis | | | 35,707 | 1,003,981 |
| 46 St. Joseph Valley | | | | |
| 47 Tawas & Bay County | | | 91,165 | 127,631 |
| 48 Toledo, Ann Arbor & Grand Trunk | 37,688 | 1,951,063 | 23,768 | 568,995 |
| 49 Toledo, Canda Southern & Detroit | | | | |
| 50 Toledo & South Haven | 2,042 | 18,378 | 641 | 4,487 |
| 51 Traverse City | 4,700 | 114,507 | 7,257 | 104,669 |
| 52 Wabash, St. Louis & Pacific | | | | |
| Commercial roads | 5,658,812 | 1,623,145,354 | 13,152,719 | 1,714,040,362 |
| ORE AND FOREST ROADS. | | | | |
| 1 Buckley & Douglas | | | | |
| 2 Hecla & Torch Lake | | | 388,309 | 1,553,236 |
| 3 Hobart & Manistee River | | | 119,400 | 835,800 |
| 4 Lake County | | | | |
| 5 Lake George & Muskegon River | | | 279,308 | 2,793,080 |
| 6 Muskegon River & Rose Lake | No Report | | | |
| Ore and forest roads | | | 787,017 | 5,182,116 |
| Total for all roads | 5,658,812 | 1,623,145,354 | 13,939,736 | 1,719,222,478 |

a Reported with the Chicago & Northwestern R. R.
b Reported with the Chicago & West Michigan R. R.
c Operated by the Detroit, Lansing & Northern.
d Reported with the Flint & Pere Marquette.
e Reported with the Lake Shore & Michigan Southern R. R.
f Reported with the Michigan Central R. R.
x For the roads reporting through and local tonnage and mileage separately only.

## Traffic.

| Total Tons of Freight Carried. | Total Freight Mileage or Tons Carried One Mile. | Average Ton Haul Through Freight. Miles. | Average Ton Haul Local Freight. Miles. | Average Ton Haul all Freight. Miles. | Average Amount Received for Each Ton Hauled. | Average Rate per Ton per Mile Through Freight. | Average Rate per Ton per Mile Local Freight. | Average Rate per Ton per Mile all Freight. |
|---|---|---|---|---|---|---|---|---|
| 1,764,735 | 7,694,245 | | | 4 36 | $1 64 | $0 00.37 | $0 00.37 | $0 00.37 |
| 56,225 | 1,110,955 | | 19 76 | 19.76 | 0 59 | | 03 032 | 03.032 |
| 878,325 | 228,634,069 | 298 | 105 | 260 | 1 34.6 | 00.44 | 01.39 | 0.52 |
| 728,062 | 41,312,810 | 59.71 | 30 51 | 56.74 | 0 28 | 00.45 | 01.22 | 0.50 |
| 7,595,592 | 1,101,428,492 | | | 143.70 | 2 13 | | | 01 48 |
| 69,036 | 1,139,157 | | | 16.05 | 0 93.6 | | | 05.64 |
| 774,279 | 43,453,419 | | | 56.32 | 1 13 | | | 02.02 |
| 489,210 | 50,919,099 | 185.898 | 70.676 | 104.084 | 1 33 | 00.459 | 02.149 | 01.282 |
| 567,371 | 56,069,960 | | | 99.46 | 1 69 | | | 01.711 |
| 1,013,965 | 80,894,052 | 188 | 78 | 80 | 1 14 | 00.472 | 01.455 | 01.43 |
| 198,828 | 11,794,140 | 71.20 | 41.50 | 59.40 | 0 97 | 01 32 | 02.27 | 01.63 |
| 612,610 | 79,316,473 | 146.33 | 69.24 | 129.46 | 1 97 | 01.374 | 02.632 | 01.522 |
| 29,755 | 325,312 | 11.45 | 6.68 | 10.94 | | | | |
| 9,184,508 | 2,021,752,859 | 538 | 168 20 | 220.60 | 1 36 | 00.460 | 00.700 | 00.617 |
| 929,039 | 23,477,533 | 23.55 | 25.68 | 25 52 | 0 86 | 06.23 | 03.16 | 03 34 |
| 22,413 | 395,028 | 36 | 12.91 | 17.62 | 0 89 | 02.26 | 07.11 | 05.08 |
| 4,196,896 | 790,022,930 | 273 | 106 | 188 | 1 35 | 00.46 | 01 364 | 00.718 |
| 2,539 | 37,272 | | | 14.68 | | | | 05.07 |
| 188,047 | 2,101,900 | | 11.17 | 11 17 | 0 49 | 04.43 | 04.43 | 04.43 |
| 7,031 | 28,124 | 4 | 4 | 4 | 0 84 | 21.09 | 21.09 | 21.09 |
| 40,624 | 2,234,365 | 55 | 55 | 55 | 1 55 | | 02.80 | 02.80 |
| | | | | | | | | 05.43 |
| 33,707 | 1,003,961 | | | | 1 53 | | | |
| 91,165 | 127,631 | | 14 | 14 | 0 28 | | 02 | 02 |
| 61,456 | 2,520,058 | 51.76 | 23.93 | 41 | 0 77 | 01.274 | 03.993 | 01.888 |
| 2,075,553 | 50,034,659 | 24.10 | | | 0 14 | | | 00 585 |
| 2,683 | 22,865 | 9 | 7 | 8 52 | 1 33 | | | 15.61 |
| 11,957 | 219,206 | 24 36 | 14.43 | 18.33 | 0 82 | 02.358 | 06.266 | 04 486 |
| 5,393,917 | 1,149,774,547 | | | 213 | 1 98 | | | 00.928 |
| 36,992,548 | 5,747,847,621 | x 286.83 | x 129.63 | 155 37 | $1 14 | | | $0 00.929 |
| 388,309 | 1,553,236 | | | 4 | $0 12 | | | $0 03.00 |
| 119,400 | 835,800 | | 7 | 7 | 0 24 | | | 03.50 |
| 279,308 | 2,793,080 | | 10 | 10 | 0 25 | | | 02.50 |
| 787,017 | | | 6.58 | 6 58 | | | | $0 03.56 |
| 37,779,565 | 5,753,029,737 | x 286.83 | x 123.33 | 152.27 | $1 72 | | | 01.13 |

## 14.—Tonnage and

| RAILROADS. | Grain. | Flour. | Provisions, Beef, Pork Etc. | Animals. | Other Agricultural Products. | Lumber and Forest Products. | Coal. |
|---|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | a | | | | | | |
| 2 Chicago & Canada Southern | 6,725 | 490 | 919 | 2,845 | 1,887 | 21,917 | 896 |
| 3 Chicago & Grand Trunk | 248,033 | 49,873 | 24,614 | 32,581 | 69,749 | 89,136 | 80,923 |
| 4 Chicago, Detroit & Canada Gr. T. Junc. | 251,773 | 58,698 | 59,491 | 72,965 | 17,505 | 41,252 | 33,922 |
| 5 Chicago & Northwestern | 1,184,977 | 209,328 | 74,751 | 316,069 | 110,824 | 1,018,563 | 752,186 |
| 6 Menominee River | b | | | | | | |
| 7 Escanaba & Lake Superior | b | | | | | | |
| 8 Chicago, Saginaw & Canada | 3,449 | 51 | | | 132 | 59,858 | 128 |
| 9 Chicago & West Michigan R. R. | c | | | | | | |
| 10 Chicago & West Michigan R'y | 31,005 | 5,908 | 1,875 | 3,910 | 23,220 | 494,738 | 26,717 |
| 11 White River | c | | | | | | |
| 12 Detroit, Grand Haven & Milwaukee | 69,725 | 79,408 | 7,747 | | 10,254 | 89,370 | 35,145 |
| 13 Detroit, Hillsdale & Southwestern | | | | | | | |
| 14 Detroit, Lansing & Northern | 47,876 | 11,123 | 1,466 | 7,304 | 11,539 | 417,976 | 10,323 |
| 15 Saginaw & Grand Rapids | d | | | | | | |
| 16 Detroit, Mackinaw & Marquette | | | | | | | |
| 17 Flint & Pere Marquette | 38,648 | 12,667 | | 6,131 | 33,221 | 651,757 | 27,912 |
| 18 Manistee | e | | | | | | |
| 19 Saginaw & Clare County | e | | | | | | |
| 20 Saginaw & M't Pleasant | e | | | | | | |
| 21 Fort Wayne & Jackson | 22,356 | 2,859 | 4,584 | 8,470 | | 78,767 | 9,891 |
| 22 Grand Haven | c | | | | | | |
| 23 Grand Rapids & Indiana | 37,394 | 4,455 | 1,165 | 4,107 | 19,449 | 412,873 | 23,896 |
| 24 Allegan & Southeastern | 454 | 387 | 39 | 182 | 509 | 24,015 | 859 |
| 25 Grand Rapids, Newaygo & Lake Shore | c | | | | | | |
| 26 Lake Shore & Michigan Southern | 1,509,444 | 347,865 | 242,430 | 563,555 | 375,654 | 1,015,199 | 1,592,070 |
| 27 Detroit, Hillsdale & Southwestern | f | | | | | | |
| 28 Detroit, Monroe & Toledo | f | | | | | | |
| 29 Kalamazoo, Allegan & Grand Rapids | f | | | | | | |
| 30 Kalamazoo & White Pigeon | f | | | | | | |
| 31 Northern Central Michigan | f | | | | | | |
| 32 Marquette, Houghton & Ontonagon | 4,068 | 2,476 | 1,050 | 4,233 | 1,081 | 27,592 | 45,020 |
| 33 Michigan Air Line R'y | 3,590 | 2,958 | 135 | 1,323 | 1,659 | 5,708 | 1,099 |
| 34 Michigan Central | 707,363 | 209,464 | 195,154 | 263,276 | 116,220 | 707,792 | 312,788 |
| 35 Detroit & Bay City | g | | | | | | |
| 36 Grand River Valley | g | | | | | | |
| 37 Jackson, Lansing & Saginaw | g | | | | | | |
| 38 Kalamazoo & South Haven | g | | | | | | |
| 39 Michigan Air Line R. R. | g | | | | | | |
| 40 Michigan Midland & Canada | 110 | 76 | 75 | 19 | 316 | 1,203 | |
| 41 Mineral Range | 1,083 | 1,219 | 1,728 | 279 | 2,209 | 2,200 | 723 |
| 42 Paw Paw | 185 | 1,476 | 8 | 203 | 458 | 2,366 | 82 |
| 43 Port Huron & Northwestern | 9,177 | 7,756 | | 1,960 | 2,224 | 7,696 | |
| 44 Saginaw Bay & Northwestern | | | | | | | |
| 45 Saginaw Valley & St. Louis | 2,455 | 405 | 370 | 161 | 829 | 22,250 | 380 |
| 46 St. Joseph Valley | | | | | | | |
| 47 Tawas & Bay County | | | 1,278 | | | 89,887 | |
| 48 Toledo, Ann Arbor & Grand Trunk | 2,475 | 1,740 | 166 | 157 | 998 | 20,442 | 24,944 |
| 49 Toledo, Canada Southern & Detroit | 628,103 | 144,575 | 66,943 | 79,385 | 60,774 | 232,327 | 273,986 |
| 50 Toledo & South Haven | 296 | 16 | | 174 | 141 | 677 | 641 |
| 51 Traverse City | 413 | 31 | 81 | 194 | 993 | 5,456 | 150 |
| 52 Wabash, St. Louis & Pacific | 1,494,400 | 116,144 | 82,958 | 399,883 | 116,701 | 845,593 | 701,439 |
| Commercial roads | 6,395,577 | 1,271,448 | 769,027 | 1,769,306 | 978,546 | 6,386,630 | 3,956,131 |
| ORE AND FOREST ROADS. | | | | | | | |
| 1 Buckley & Douglas | | | | | | | |
| 2 Hecla & Torch Lake | 400 | | | | | 15,753 | 15,000 |
| 3 Hobart & Manistee River | | | | | | 119,400 | |
| 4 Lake County | | | | | | | |
| 5 Lake George & Muskegon River | | | | | | 279,308 | |
| 6 Muskegon River & Rose Lake | No Re | port. | | | | | |
| Ore and forest roads | 400 | | | | | 414,461 | 15,000 |
| Total for all roads | 6,395,977 | 1,271,448 | 769,027 | 1,769,306 | 978,546 | 6,801,091 | 3,971,131 |

a Not classified.
b Included with Chicago & Northwestern Railway.
c Included with Chicago & West Michigan Railway.
d Included with Detroit, Lansing & Northern Railroad.
e Included with Flint & Pere Marquette Railroad

## Commodities Carried.

| Plaster. | Salt. | Petroleum. | R. R. Iron and Steel Rails. | Pig and Bloom Iron. | Other Iron and Castings. | Ores. | Stone and Brick, Sand and Clay. | Manufactures. | Merchandize and Other Articles. | Total Tons Carried 1881. | Total Tons Carried 1880. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 1,764,735 | |
| | 110 | 159 | | | 177 | | 882 | 2,166 | 17,050 | 56,225 | 50,860 |
| 5,963 | 45,797 | 3,371 | 15,429 | 5,707 | 14,016 | 1,332 | 7,111 | 83,820 | 100,930 | 878,325 | 702,153 |
| 323 | 19,692 | 415 | 419 | 10,740 | 11,769 | 380 | 8,898 | 41,478 | 98,862 | 728,082 | 663,604 |
| 9,402 | 36,270 | 32,457 | 183,677 | 170,926 | 138,934 | 1,708,910 | 137,808 | 73,079 | 1,437,441 | 7,595,592 | 5,594,700 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 109 | 263 | | 105 | | | | | | 4,941 | 69,036 | 125,068 |
| | | | | | | | | | | | |
| 18,084 | | | | 29,750 | | 24,917 | 11,692 | | 102,463 | 774,279 | 602,386 |
| | | | | | | | | | | | |
| 7,331 | 2,080 | | | | | | 3,617 | | 184,533 | 489,210 | 476,425 |
| | | | | | | | | | | | |
| 2,766 | 1,676 | | | | | | 6,103 | 8,534 | 40,685 | 567,371 | 503,450 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 1,614 | 72,397 | | | | | | | 11,812 | 157,806 | 1,013,965 | 868,816 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 1,176 | 14,909 | | | | | | 6,621 | | 49,175 | 198,828 | 226,880 |
| | | | | | | | | | | | |
| 5,066 | 2,844 | 2,796 | 3,524 | 2,029 | 2,167 | | 6,831 | 30,444 | 53,570 | 612,610 | 540,251 |
| 110 | 49 | 86 | 38 | 123 | 190 | | 163 | 1,520 | 1,031 | 29,755 | 12,310 |
| | | | | | | | | | | | |
| 25,460 | 74,780 | 307,672 | 160,406 | 273,613 | 398,471 | 180,037 | 289,073 | 413,324 | 1,394,855 | 9,164,508 | 8,350,336 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 584 | 183 | | 451 | 7,704 | 977 | 801,660 | 4,131 | 1,844 | 16,985 | 920,039 | 835,578 |
| 24 | 508 | 90 | | | 170 | 35 | 91 | 1,183 | 3,840 | 22,413 | 15,068 |
| 19,792 | 163,182 | 6,514 | 39,234 | 65,561 | 22,643 | | 106,258 | 135,161 | 1,036,494 | 4,196,896 | [x] 4,108,106 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | 27 | | 6 | | 30 | 348 | 329 | 2,589 | 2,481 |
| | | | | | | 173,457 | | 815 | 5,334 | 188,047 | 134,692 |
| 68 | 91 | 41 | | | 164 | | 257 | 892 | 740 | 7,031 | 5,344 |
| | | | 4,989 | | | | | | 6,822 | 40,624 | 14,272 |
| | | | | | | | | | | | 135,207 |
| 26 | 658 | | | | | | 2,663 | 637 | 4,823 | 35,707 | 34,666 |
| | | | | | | | | | | | |
| | | | | | | | | | | 91,165 | 60,011 |
| | | 192 | 24 | 1,840 | 324 | 57 | 1,590 | 2,662 | 3,845 | 61,456 | 42,819 |
| | | 1,069 | 94,641 | 47,897 | 6,629 | 20,582 | 6,714 | 106,728 | 305,200 | 2,075,553 | 1,850,994 |
| 1 | | 21 | | | 12 | | | 408 | 290 | 2,683 | 1,785 |
| 160 | 212 | 129 | | 13 | 20 | | 3 | 332 | 3,761 | 11,957 | 12,780 |
| [r] 80,337 | 71,773 | 31,227 | 190,273 | 46,093 | 83,434 | 27,395 | 114,756 | 150,533 | 840,978 | 5,393,914 | |
| 178,336 | 507,480 | 386,239 | 693,237 | 661,996 | 680,103 | 2,937,762 | 715,892 | 1,067,770 | 5,872,283 | 36,992,548 | 25,976,042 |
| 150 | | | 20 | | 1,500 | 350,080 | 3,406 | | 2,000 | 388,309 | 380,841 |
| | | | | | | | | | | 119,400 | 151,264 |
| | | | | | | | | | | 279,308 | 348,903 |
| | | | | | | | | | | | 73,500 |
| 150 | | | 20 | | 1,500 | 350,080 | 3,406 | | 2,000 | 787,027 | 954,508 |
| 178,336 | 507,480 | 386,239 | 693,257 | 661,996 | 681,603 | 3,287,842 | 719,298 | 1,067,770 | 5,874,283 | 37,779,565 | 26,930,550 |

[t] Included with Lake Shore & Michigan Southern Railway.
[s] Included with Michigan Central Railroad.
[x] Includes Detroit & Bay City, reported separately 1880.
[r] Cotton.

## 15.—Equip-

| RAILROADS. | Locomotives. Over 30 Tons, Number. | Over 20 Tons, Number. | Over 10 Tons, Number. | Total Number Locomotives. | Passenger, No. | Baggage and Express, No. |
|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | a | | | | | |
| 2 Chicago & Canada Southern | b | | | | | |
| 3 Chicago & Grand Trunk | 10 | 28 | | 38 | 18 | 9 |
| 4 Chicago, Detroit & Canada Grand Trunk Junction | | 21 | | 21 | 17 | 4 |
| 5 Chicago & Northwestern | 331 | 172 | 15 | 518 | 213 | 89 |
| 6 Menominee River | c | | | | | |
| 7 Escanaba & Lake Superior | e | | | | | |
| 8 Chicago, Saginaw & Canada | 2 | 2 | | 4 | 3 | 1 |
| 9 Chicago & West Michigan R. R. | d | | | | | |
| 10 Chicago & West Michigan R'y | 23 | 13 | 7 | 43 | 20 | 14 |
| 11 White River | d | | | | | |
| 12 Detroit, Grand Haven & Milwaukee | 6 | 28 | 5 | 39 | 29 | 11 |
| 13 Detroit, Hillsdale & Southwestern | | 2 | 1 | 3 | 2 | 2 |
| 14 Detroit, Lansing & Northern | 30 | | | 30 | 21 | 10 |
| 15 Saginaw & Grand Rapids | e | | | | | |
| 16 Detroit, Mackinaw & Marquette | 6 | | | 6 | 7 | 2 |
| 17 Flint & Pere Marquette | 46 | 13 | 3 | 62 | 53 | 15 |
| 18 Manistee | f | | | | | |
| 19 Saginaw & Clare County | f | | | | | |
| 20 Saginaw & M't Pleasant | f | | | | | |
| 21 Fort Wayne & Jackson | 4 | 6 | | 10 | 7 | 2 |
| 22 Grand Haven | d | | | | | |
| 23 Grand Rapids & Indiana | 26 | 20 | 1 | 47 | 26 | 12 |
| 24 Allegan & Southeastern | g | | | | | |
| 25 Grand Rapids, Newaygo & Lake Shore | d | | | | | |
| 26 Lake Shore & Michigan Southern | 378 | 154 | | 532 | 164 | 96 |
| 27 Detroit, Hillsdale & Southwestern | h | | | | | |
| 28 Detroit, Monroe & Toledo | h | | | | | |
| 29 Kalamazoo, Allegan & Grand Rapids | h | | | | | |
| 30 Kalamazoo & White Pigeon | h | | | | | |
| 31 Northern Central Michigan | h | | | | | |
| 32 Marquette, Houghton & Ontonagon | 20 | 7 | 3 | 30 | 5 | 5 |
| 33 Michigan Air Line R'y | | 1 | 1 | 2 | 1 | 1 |
| 34 Michigan Central | 208 | 45 | 1 | 254 | 130 | 39 |
| 35 Detroit & Bay City | i | | | | | |
| 36 Grand River Valley | i | | | | | |
| 37 Jackson, Lansing & Saginaw | i | | | | | |
| 38 Kalamazoo & South Haven | i | | | | | |
| 39 Michigan Air Line R. R. | i | | | | | |
| 40 Michigan Midland & Canada | | | | | | |
| 41 Mineral Range | | 1 | 3 | 4 | 2 | 2 |
| 42 Paw Paw | j | | | | | |
| 43 Port Huron & Northwestern | | 3 | 8 | 11 | 16 | 6 |
| 44 Saginaw Bay & Northwestern | | 4 | 2 | 6 | | |
| 45 Saginaw Valley & St. Louis | | 4 | | 4 | 2 | 2 |
| 46 St. Joseph Valley | | | 1 | 1 | 1 | |
| 47 Tawas & Bay County | | | 3 | 3 | | |
| 48 Toledo, Ann Arbor & Grand Trunk | 4 | 2 | | 6 | 9 | 2 |
| 49 Toledo, Canada Southern & Detroit | | | | | | |
| 50 Toledo & South Haven | | 1 | 1 | 2 | 2 | |
| 51 Traverse City | | | 1 | 1 | | |
| 52 Wabash, St. Louis & Pacific | 536 | 40 | 10 | 586 | 230 | 137 |
| Commercial roads | 1,630 | 567 | 66 | 2,263 | 978 | 461 |
| ORE AND FOREST ROADS. | | | | | | |
| 1 Buckley & Douglas | | | | | | |
| 2 Hecla & Torch Lake | | 4 | 1 | 5 | 1 | |
| 3 Hobart & Manistee River | | | 2 | 2 | | |
| 4 Lake County | | 1 | 1 | 2 | | |
| 5 Lake George & Muskegon River | | | 4 | 4 | | |
| 6 Muskegon River & Rose Lake | No Report. | | | | | |
| Ore and forest roads | | 5 | 8 | 13 | 1 | |
| Total for all roads | 1,630 | 572 | 74 | 2,276 | 979 | 461 |

a Equipment owned by Can. Southern R. R. Co.
b Equipped by L. S. & M. S. R. R. Co., Lessees.
c Equipped by Chicago & Northwestern R. R. Co.
d Included in Report of Chi. & W. M. R. R. Co.
e Operated by D., L. & N. R. R. Co.
f Operated by Flint & Pere Marquette R. R. Co.
g Operated by the Grand Rapids & Ind. R. R. Co.
h Operated by the L. S. & M S. R. R. Co.
i Operated by the Michigan Central R. R.
j Equipped by the Toledo & South Haven R.R.Co.

ment.

| Cars. | | | | | | | Locomotives with Train Brake, No. | Passenger Cars with Train Brake, No. | What Brake used on Passenger Trains. | Cars having Miller's Platform and Buffer, Number. |
|---|---|---|---|---|---|---|---|---|---|---|
| Box Freight, Number. | Stock, No. | Platform, No. | Ore, No. | Conductors' Way, No. | All Other, No. | Total Number Cars. | | | | |
| 9 | 15 | 115 | | 43 | 6 | 215 | 14 | 27 | Westinghouse | 27 |
| | | | | | | 21 | 8 | 21 | Vacuum | 21 |
| 7,548 | 1,409 | 1,800 | 3,357 | 237 | 131 | 14,784 | 207 | 302 | Westinghouse | 302 |
| 3 | | 42 | | 1 | | 50 | 1 | 4 | Westinghouse | 2 |
| 371 | | 960 | | 7 | 36 | 1,408 | | 34 | Westinghouse and Vacuum | 34 |
| 369 | 48 | 198 | | 11 | 30 | 696 | 16 | 42 | Westinghouse | 42 |
| 30 | 10 | 2 | | | 8 | 54 | 2 | 4 | Westinghouse | 4 |
| 404 | 16 | 530 | | 20 | 4 | 1,005 | 11 | 32 | Westinghouse | 32 |
| 50 | | 125 | | 5 | 24 | 213 | 2 | 8 | Westinghouse | 9 |
| 754 | 8 | 967 | | 6 | 198 | 2,001 | 20 | 68 | Westinghouse and Eames | 67 |
| 222 | 14 | 153 | | 5 | | 403 | 3 | 9 | Ward Air | |
| 567 | | 1,050 | | 33 | 10 | 1,698 | 18 | 38 | Westinghouse | None |
| 8,869 | 2,008 | x 4,470 | | 257 | 156 | 16,020 | 432 | 260 | Westinghouse | 260 |
| 23 | | 92 | 1,941 | | 71 | 2,142 | 3 | 10 | Westinghouse | 10 |
| 18 | | 4 | | | | 24 | 2 | 2 | Vacuum | 2 |
| 4,523 | 486 | 1,431 | | 155 | 6 | 6,770 | 67 | 163 | Automatic and Westinghouse comb | 163 |
| 13 | | 22 | 40 | | 4 | 83 | 4 | | Steam Brake | 4 |
| 170 | 11 | 80 | | 1 | | 284 | 11 | 22 | | 12 |
| 2 | | 60 | | | 60 | 122 | | | Hand Brake | |
| 10 | | 40 | | 1 | | 55 | 2 | | Loughbridge Air | 3 |
| | | 3 | | | | 4 | | | | |
| | | 5 | | 2 | 106 | 113 | | | | |
| 30 | | 95 | | | | 136 | 2 | 9 | Westinghouse Air | 5 |
| 2 | | 4 | | | 4 | 12 | | | | |
| | | 10 | | | | 10 | | | | |
| 14,239 | 2,304 | 5,274 | | 325 | | 22,509 | 138 | 363 | Westinghouse Air | 367 |
| 33,281 | 6,329 | 17,532 | 5,338 | 1,109 | 854 | 70,832 | 963 | 1,418 | | 1,366 |
| 4 | | 24 | 133 | | 4 | 166 | | | | |
| | | 6 | | | 36 | 42 | | | | |
| | | | | | 29 | 29 | | | | |
| 1 | | 6 | | | 67 | 74 | | | | |
| 5 | | 36 | 133 | | 136 | 311 | | | | |
| 33,236 | 6,329 | 17,568 | 5,471 | 1,109 | 990 | 71,143 | 963 | 1,418 | | 1,366 |

x 2,409 Coal Cars.

## 16.—Stations and Employes.

| RAILROADS. | Stations. Whole Number. | Stations. In Michigan. | Employes. Whole Number. | Employes. In Michigan. |
|---|---|---|---|---|
| 1 Canada Southern Bridge | 2 | 2 | | |
| 2 Chicago & Canada Southern | 16 | 15 | | |
| 3 Chicago & Grand Trunk | 73 | 43 | 1,838 | 1,121 |
| 4 Chicago, Detroit & Canada Grand Trunk Junction | 12 | 12 | 619 | 619 |
| 5 Chicago & Northwestern | 460 | 17 | 15,357 | 1,430 |
| 6 Menominee River | a | | | |
| 7 Escanaba & Lake Superior | a | | | |
| 8 Chicago, Saginaw & Canada | 13 | 13 | 65 | 65 |
| 9 Chicago & West Michigan Railroad | b | | | |
| 10 Chicago & West Michigan Railway | 87 | 87 | 1,505 | 1,505 |
| 11 White River | b | | | |
| 12 Detroit, Grand Haven & Milwaukee | 36 | 36 | 1,099 | 1,099 |
| 13 Detroit, Hillsdale & Southwestern | 14 | 14 | 50 | 50 |
| 14 Detroit, Lansing & Northern | 66 | 66 | 973 | 970 |
| 15 Saginaw & Grand Rapids | c | | | |
| 16 Detroit, Mackinaw & Marquette | 24 | 24 | | |
| 17 Flint & Pere Marquette | 75 | 75 | 1,726 | 1,726 |
| 18 Manistee | d | | | |
| 19 Saginaw & Clare County | d | | | |
| 20 Saginaw & Mt. Pleasant | d | | | |
| 21 Fort Wayne & Jackson | 19 | 9 | 210 | 97 |
| 22 Grand Haven | b | | | |
| 23 Grand Rapids & Indiana | 80 | 68 | 1,525 | 1,328 |
| 24 Allegan & Southeastern | 4 | 4 | | |
| 25 Grand Rapids, Newaygo & Lake Shore | b | | | |
| 26 Lake Shore & Michigan Southern | 270 | 80 | 11,460 | 2,865 |
| 27 Detroit, Hillsdale & Southwestern | | | | |
| 28 Detroit, Monroe & Toledo | e | | | |
| 29 Kalamazoo, Allegan & Grand Rapids | e | | | |
| 30 Kalamazoo & White Pigeon | e | | | |
| 31 Northern Central Michigan | e | | | |
| 32 Marquette, Houghton & Ontonagon | 12 | 12 | 550 | 550 |
| 33 Michigan Air Line Railway | 6 | 6 | 43 | 43 |
| 34 Michigan Central | 188 | 166 | 6,500 | 4,500 |
| 35 Detroit & Bay City | f | | | |
| 36 Grand River Valley | f | | | |
| 37 Jackson, Lansing & Saginaw | f | | | |
| 38 Kalamazoo & South Haven | f | | | |
| 39 Michigan Air Line Railroad | f | | | |
| 40 Michigan, Midland & Canada | 2 | 2 | 12 | 12 |
| 41 Mineral Range | 2 | 2 | 47 | 47 |
| 42 Paw Paw | 2 | 2 | 12 | 12 |
| 43 Port Huron & Northwestern | 38 | 38 | 202 | 202 |
| 44 Saginaw Bay & Northwestern | 1 | 1 | 110 | 110 |
| 45 Saginaw Valley & St. Louis | 16 | 16 | 35 | 35 |
| 46 St. Joseph Valley | 2 | 2 | 18 | 18 |
| 47 Tawas & Bay County | 8 | 8 | 65 | 65 |
| 48 Toledo, Ann Arbor & Grand Trunk | 17 | 14 | 144 | 23 |
| 49 Toledo, Canada Southern & Detroit | 17 | 15 | 578 | 504 |
| 50 Toledo & South Haven | 2 | 2 | 12 | 12 |
| 51 Traverse City | 6 | 6 | 30 | 30 |
| 52 Wabash, St. Louis & Pacific | 758 | 14 | 13,288 | |
| Commercial Roads | 2,318 | 871 | 58,033 | 18,958 |
| ORE AND FOREST ROADS. | | | | |
| 1 Buckley & Douglas | 2 | 2 | 6 | 6 |
| 2 Hecla & Torch Lake | 2 | 2 | 45 | 45 |
| 3 Hobart & Manistee River | 2 | 2 | 38 | 38 |
| 4 Lake County | 2 | 2 | 10 | 10 |
| 5 Lake George & Muskegon River | 10 | 10 | 109 | 109 |
| 6 Muskegon River & Rose Lake | No report. | | | |
| Ore and Forest Roads | 18 | 18 | 208 | 208 |
| Total for all Roads | 2,336 | 889 | 58,241 | 19,166 |

a Included with the Chicago & N. W. Report.
b Included with the Chicago & W. M. Report.
c Operated by the D., L. & N. R. R.
d Included with the Flint & P. Marquette R. R.
e Included with Lake Shore & M. S. R. R. Co.
f Included with the Report of the M. C. R. R. Co.

## 17.—Taxes.

| RAILROADS. | Total Taxes Assessed for Michigan. | Miles of Road Operated in Michigan. | Amount of Taxes Assessed per Mile of Railroad. | Total Income Taxed in Michigan. | Per Cent of Taxes on Gross Income. |
|---|---|---|---|---|---|
| 1 Canada Southern Bridge | $803 14 | 3.66 | $219 44 | $31,651 60 | 2.53 |
| 2 Chicago & Canada Southern | 998 16 | 63.10 | 15 81 | 49,908 31 | 2 |
| 3 Chicago & Grand Trunk | 23,386 18 | 224.00 | 104 29 | 1,078,206 08 | 2 17 |
| 4 Chicago, Det. & Can. G. T. Junc. | 9,513 57 | 59.37 | 160 24 | 396,279 21 | 2.40 |
| 5 Chicago & Northwestern | 51,947 77 | 172.45 | 301 23 | 1,961,525 62 | 2.81 |
| 6 Menominee River | 9,204 65 | 39.75 | 231 56 | 359,831 77 | 2.55 |
| 7 Escanaba & Lake Superior | a | | | | |
| 8 Chicago, Saginaw & Canada | 2,029 29 | 38.00 | 53 40 | 101,464 71 | 2 |
| 9 Chicago & West Michigan R. R. | e 15,485 64 | | | 774,282 48 | 2 |
| 10 Chicago & West Michigan R'y | 7,263 09 | 366.60 | 62 05 | 363,154 81 | 2 |
| 11 White River | b | | | | |
| 12 Detroit, G'd Haven & Milwaukee | x 25,171 40 | 189.00 | 133 18 | 1,196,929 50 | 2.11 |
| 13 Detroit, Hillsdale & Southwest'n | 1,384 00 | 64 80 | 21 36 | 69,199 81 | 2 |
| 14 Detroit, Lansing & Northern | 32,308 16 | 225.57 | 143 23 | 1,377,698 80 | 2.35 |
| 15 Saginaw & Grand Rapids | c | | | | |
| 16 Detroit, Mackinaw & Marquette | 537 14 | y 30.00 | 17 90 | 26,857 08 | 2 |
| 17 Flint & Pere Marquette | 43,227 39 | y 317.71 | 136 06 | 1,864,526 30 | 2 32 |
| 18 Manistee | d | | | | |
| 19 Saginaw & Clare County | d | | | | |
| 20 Saginaw & M't Pleasant | d | | | | |
| 21 Fort Wayne & Jackson | 2,722 37 | 46.00 | 59 19 | 136,113 96 | 2 |
| 22 Grand Haven | e 1,680 62 | | 29 23 | 84,031 14 | 2 |
| 23 Grand Rapids & Indiana | 37,742 51 | 279.39 | 135 09 | 1,630,603 85 | 2.31 |
| 24 Allegan & Southeastern | 248 12 | 11.50 | 21 57 | 12,405 97 | 2 |
| 25 G'd Rapids, Newaygo & L. Shore | e 2,071 68 | | 45 01 | 103,584 03 | 2 |
| 26 Lake Shore & Michigan Southern | x 46,743 60 | 193.02 | 242 17 | 2,492,523 45 | 1.87 |
| 27 Det., Hillsdale & Southwest'n | | | | | |
| 28 Detroit, Monroe & Toledo | 11,120 31 | 54.67 | 203 40 | 443,570 51 | 2.51 |
| 29 Kal., Allegan & G'd Rapids | 3,082 59 | 58.42 | 52 76 | 154,129 66 | 2 |
| 30 Kalamazoo & White Pigeon | 2,225 79 | 36 57 | 60 86 | 111,289 43 | 2 |
| 31 Northern Central Michigan | 1,914 78 | 61.14 | 31 32 | 95,738 76 | 2.51 |
| 32 Marq., Houghton & Ontonagon | 23,188 77 | 90.51 | 256 22 | 893,638 92 | 2 |
| 33 Michigan Air Line R'y | 749 79 | 35 00 | 21 33 | 37,489 56 | 2 |
| 34 Michigan Central | x 134,083 20 | 221.00 | 606 71 | 7,864,665 46 | 1.70 |
| 35 Detroit & Bay City | 13,578 19 | xx 151 50 | 89 62 | 654,606 23 | 2.08 |
| 36 Grand River Valley | x 14,934 00 | 84.00 | 177 79 | 342,643 09 | 4.35 |
| 37 Jackson, Lansing & Saginaw | 20,149 55 | 231.80 | 86 93 | 980,718 26 | 2.05 |
| 38 Kalamazoo & South Haven | 1,405 08 | 40.00 | 35 13 | 70,254 18 | 2 |
| 39 Michigan Air Line R. R. | 2,906 76 | 109.10 | 26 64 | 145,338 22 | 2 |
| 40 Michigan Midland & Canada | 114 49 | 14.68 | 7 80 | 5,724 50 | 2 |
| 41 Mineral Range | 3,038 69 | 12.50 | 243 09 | 117,956 24 | 2.57 |
| 42 Paw Paw | 230 29 | 4.00 | 57 57 | 11,514 52 | 2 |
| 43 Port Huron & Northwestern | 2,709 91 | 151.00 | 25 77 | 135,495 41 | 2 |
| 44 Saginaw Bay & Northwestern | 3,772 96 | 30.00 | 125 76 | 165,765 23 | 3.19 |
| 45 Saginaw Valley & St. Louis | 2,006 78 | yy 38.60 | 51 99 | 100,338 92 | 2 |
| 46 St. Joseph Valley | 25 31 | 10.00 | 2 53 | 1,265 68 | 2 |
| 47 Tawas & Bay County | 566 59 | 23.00 | 24 20 | 28,329 29 | |
| 48 Toledo, Ann Arbor & G'd Trunk | 2,178 90 | 56.00 | 38 99 | 108,944 92 | 2 |
| 49 Toledo, Can. Southern & Detroit | 10,104 60 | 47 27 | 213 77 | 399,846 81 | 2.53 |
| 50 Toledo & South Haven | 133 43 | 9.00 | 14 83 | 6,671 54 | 2 |
| 51 Traverse City | 566 06 | 26.00 | 21 77 | 28,303 21 | 2 |
| 52 Wabash, St. Louis & Pacific | 2,915 60 | 78.28 | 37 24 | 145,780 06 | 2 |
| Commercial roads | $572,170 90 | 3,997.96 | $143 11 | $27,160,792 09 | 2.11 |
| ORE AND FOREST ROADS. | | | | | |
| 1 Buckley & Douglas | $107 43 | 8.00 | $13 43 | $5,371 70 | 2 |
| 2 Hecla & Torch Lake | 1,222 44 | 4.50 | 271 61 | 46,748 16 | 2.62 |
| 3 Hobart & Manistee River | 595 43 | 9.24 | 64 44 | 29,771 56 | 2 |
| 4 Lake County | 434 29 | 6 00 | 72 38 | 21,714 31 | 2 |
| 5 Lake George & Muskegon River | 1,406 39 | 19.88 | 70 74 | 70,319 65 | 2 |
| 6 Muskegon River & Rose Lake | No report. | | | | |
| Ore and forest roads | $3,765 98 | 47.62 | 79 06 | 178,925 38 | 2.16 |
| Total for all roads | $575,936 88 | 4,045.58 | 142 11 | $27,334,717 87 | 2 11 |

a Included in Chicago & Northwestern taxes.
b Included in Chicago & West Michigan taxes.
c Included in Detroit, Lansing & Northern taxes.
d Included in Flint & Pere Marquette taxes.
e For nine months only, balance of year is included with Chicago & West Michigan taxes.
x Roads incorporated under special charter.
y Average miles operated during the year.
xx Includes 4.25 miles of road belonging to Bay City Street & Transfer Railway Co.
yy Includes Saginaw & Grand Rapids track, 3.60 miles, and 6 miles Jackson, Lansing & Saginaw track

## 18.—Summary of Accidents.

| RAILROADS. | Killed. Passengers. | Killed. Employes. | Killed. Others. | Injured. Passengers. | Injured. Employes. | Injured. Others. | Killed. | Injured. | Total. | No. of Casualties Purely Accidental. | Casualties from want of Caution or Carelessness, Number. | People Killed on Track Intoxicated. | Trespassers, Tramps, and Ride Stealers Killed or Injured. | Suicides. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | | 1 | | | 1 | | 1 | 1 | 2 | | 2 | | | |
| 2 Chicago & Canada Southern | | | | | | | | | | | | | | |
| 3 Chicago & Grand Trunk | | 3 | 4 | 11 | 37 | 2 | 7 | 50 | 57 | 29 | 28 | 1 | 3 | |
| 4 Chicago, Detroit & Canada G'd Trunk Junc. | | 3 | 2 | | 22 | | 5 | 22 | 27 | 5 | 22 | | | |
| 5 Chicago & Northwestern | | 6 | 7 | | 32 | 3 | 13 | 35 | 48 | 5 | 43 | 2 | 6 | |
| 6 Menominee River | a | | | | | | | | | | | | | |
| 7 Escanaba & Lake Superior | a | | | | | | | | | | | | | |
| 8 Chicago, Saginaw & Canada | | | | | | | | | | | | | | |
| 9 Chicago & West Michigan R. R. | b | | | | | | | | | | | | | |
| 10 Chicago & West Michigan R'y | 1 | 8 | 4 | 1 | 8 | 3 | 13 | 7 | 20 | | 20 | 2 | 4 | |
| 11 White River | b | | | | | | | | | | | | | |
| 12 Detroit, Grand Haven & Milwaukee | | 7 | 6 | 5 | 7 | 5 | 13 | 17 | 30 | 3 | 27 | | 7 | |
| 13 Detroit, Hillsdale & Southwestern | | | | | | | | | | | | | | |
| 14 Detroit, Lansing & Northern | | 1 | 2 | 1 | 5 | 1 | 3 | 7 | 10 | 2 | 8 | 1 | 2 | |
| 15 Saginaw & Grand Rapids | c | | | | | | | | | | | | | |
| 16 Detroit, Mackinaw & Marquette | | | | | | | | | | | | | | |
| 17 Flint & Pere Marquette | 1 | 5 | 6 | 2 | 30 | 7 | 12 | 39 | 51 | 1 | 50 | 5 | 5 | |
| 18 Manistee | d | | | | | | | | | | | | | |
| 19 Saginaw & Clare County | d | | | | | | | | | | | | | |
| 20 Saginaw & M't Pleasant | d | | | | | | | | | | | | | |
| 21 Fort Wayne & Jackson | | | | | 2 | | | 2 | 2 | 1 | 1 | | | |
| 22 Grand Haven | b | | | | | | | | | | | | | |
| 23 Grand Rapids & Indiana | 1 | 6 | 1 | 2 | 12 | 3 | 8 | 17 | 25 | 6 | 19 | 1 | 3 | |
| 24 Allegan & Southeastern | | | | | | | | | | | | | | |
| 25 Grand Rapids, Newaygo & Lake Shore | b | | | | | | | | | | | | | |
| 26 Lake Shore & Michigan Southern | | 3 | 12 | 2 | 25 | 7 | 15 | 34 | 49 | 2 | 47 | 4 | 18 | 1 |
| 27 Detroit, Hillsdale & Southwestern | e | | | | | | | | | | | | | |
| 28 Detroit, Monroe & Toledo | e | | | | | | | | | | | | | |
| 29 Kalamazoo, Allegan & Grand Rapids | e | | | | | | | | | | | | | |
| 30 Kalamazoo & White Pigeon | e | | | | | | | | | | | | | |
| 31 Northern Central Michigan | e | | | | | | | | | | | | | |
| 32 Marquette, Houghton & Ontonagon | | 6 | 2 | | 12 | 1 | 8 | 13 | 21 | 4 | 17 | | 2 | |
| 33 Michigan Air Line R'y | | | | | 2 | | | 2 | 2 | 2 | | | | |
| 34 Michigan Central | 5 | 7 | 20 | 14 | 68 | 29 | 32 | 111 | 143 | 9 | 134 | 10 | 28 | |
| 35 Detroit & Bay City | f | | | | | | | | | | | | | |
| 36 Grand River Valley | f | | | | | | | | | | | | | |
| 37 Jackson, Lansing & Saginaw | f | | | | | | | | | | | | | |
| 38 Kalamazoo & South Haven | f | | | | | | | | | | | | | |
| 39 Michigan Air Line R. R. | f | | | | | | | | | | | | | |
| 40 Michigan Midland & Canada | | | | | | | | | | | | | | |
| 41 Mineral Range | | | | | 1 | | | 1 | 1 | | 1 | | | |
| 42 Paw Paw | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43 Port Huron & Northwestern | | 1 | | | | | 1 | | 1 | | 1 | | | |
| 44 Saginaw Bay & Northwestern | 8 | 1 | 1 | 2 | 1 | | 5 | 8 | 8 | 7 | 1 | | | |
| 45 Saginaw Valley & St. Louis | | | | | | | | | | | | | | |
| 46 St. Joseph Valley | | | | | | | | | | | | | | |
| 47 Tawas & Bay County | | | | | 2 | | | 2 | 2 | 1 | 1 | | | |
| 48 Toledo, Ann Arbor & Grand Trunk | | | | | 1 | | | 1 | 1 | 1 | | | | |
| 49 Toledo, Canada Southern & Detroit | 1 | 1 | | | 7 | | 2 | 7 | 9 | 5 | 4 | | | |
| 50 Toledo & South Haven | | | | | | | | | | | | | | |
| 51 Traverse City | | | | | | | | | | | | | | |
| 52 Wabash, St. Louis & Pacific | | | | | | | | | | | | | | |
| Commercial Roads | 12 | 59 | 67 | 40 | 270 | 61 | 138 | 371 | 509 | 83 | 426 | 26 | 78 | 1 |
| ORE AND FOREST ROADS. | | | | | | | | | | | | | | |
| 1 Buckley & Douglas | | | | | | | | | | | | | | |
| 2 Hecla & Torch Lake | | | | | | | | | | | | | | |
| 3 Hobart & Manistee River | | | | | | | | | | | | | | |
| 4 Lake County | | | | | | | | | | | | | | |
| 5 Lake George & Muskegon River | | 2 | | | | | 2 | | 2 | | 2 | 2 | | |
| 6 Muskegon River & Rose Lake | No Re | port. | | | | | | | | | | | | |
| Ore and Forest Roads | | 2 | | | | | 2 | 2 | | | 2 | 2 | | |
| Total for all Roads | 12 | 61 | 67 | 40 | 270 | 61 | 140 | 371 | 511 | 83 | 428 | 28 | 78 | 1 |

[a] Included with Chicago & Northwestern Report.
[b] Included with the Chicago & West Michigan Report.
[c] Included with the Detroit, Lansing & Northern Report.
[d] Included with the Flint and Pere Marquette Report.
[e] Included with the Lake Shore & Michigan Southern Report.
[f] Included with the Michigan Central Report.

## 19.—Causes

| RAILROADS. | From Collisions. | | | From Coupling Cars. | | | From Derailments. | | | Falling from Trains. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| 1 Canada Southern Bridge | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2 Chicago & Canada Southern | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 3 Chicago & Grand Trunk | ---- | 2 | ---- | ---- | 19 | ---- | 9 | 3 | ---- | ---- | 3 | ---- |
| 4 Chicago, Detroit & Canada G'd Trunk Junc. | ---- | ---- | ---- | ---- | 10 | ---- | ---- | ---- | ---- | ---- | 3 | ---- |
| 5 Chicago & Northwestern | ---- | ---- | ---- | ---- | 9 | ---- | ---- | 1 | ---- | ---- | 8 | ---- |
| 6 Menominee River | a---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 7 Escanaba & Lake Superior | a---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 8 Chicago, Saginaw & Canada | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 9 Chicago & West Michigan Railroad | ---- | ---- | ---- | ---- | 7 | ---- | ---- | ---- | ---- | 2 | 2 | ---- |
| 10 Chicago & West Michigan Railway | b---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 11 White River | b---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 12 Detroit, Grand Haven & Milwaukee | 2 | ---- | ---- | ---- | 7 | ---- | ---- | ---- | ---- | ---- | 8 | ---- |
| 13 Detroit, Hillsdale & Southwestern | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 14 Detroit, Lansing & Northern | ---- | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 15 Saginaw & Grand Rapids | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16 Detroit, Mackinaw & Marquette | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 17 Flint & Pere Marquette | ---- | ---- | ---- | ---- | 19 | ---- | ---- | ---- | ---- | ---- | 3 | 1 |
| 18 Manistee | c---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 19 Saginaw & Clare County | c---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 20 Saginaw & Mt. Pleasant | c---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 21 Fort Wayne & Jackson | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 22 Grand Haven | b---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 23 Grand Rapids and Indiana | 2 | ---- | ---- | ---- | 14 | ---- | ---- | ---- | ---- | ---- | 2 | ---- |
| 24 Allegan & Southeastern | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 25 Grand Rapids, Newaygo & Lake Shore | b---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 26 Lake Shore & Michigan Southern | ---- | ---- | ---- | ---- | 16 | ---- | ---- | ---- | ---- | 1 | 1 | ---- |
| 27 Detroit, Hillsdale & Southwestern | d---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 28 Detroit, Monroe & Toledo | d---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 29 Kalamazoo, Allegan & Grand Rapids | d---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 30 Kalamazoo & White Pigeon | d---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 31 Northern Central Michigan | d---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 32 Marquette, Houghton & Ontonagon | ---- | ---- | ---- | ---- | 9 | ---- | ---- | ---- | ---- | ---- | 4 | ---- |
| 33 Michigan Air Line Railway | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 34 Michigan Central | 1 | ---- | ---- | ---- | 40 | ---- | 12 | 1 | ---- | 3 | 9 | ---- |
| 35 Detroit & Bay City | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 36 Grand River Valley | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 37 Jackson, Lansing & Saginaw | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 38 Kalamazoo & South Haven | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 39 Michigan Air Line Railroad | e---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 40 Michigan, Midland & Canada | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 41 Mineral Range | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 42 Paw Paw | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 43 Port Huron & Northwestern | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- |
| 44 Saginaw Bay and Northwestern | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- |
| 45 Saginaw Valley & St. Louis | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 46 St. Joseph Valley | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 47 Tawas & Bay County | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 48 Toledo, Ann Arbor & Grand Trunk | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- |
| 49 Toledo, Canada Southern & Detroit | ---- | ---- | ---- | ---- | 5 | ---- | ---- | ---- | ---- | ---- | 2 | ---- |
| 50 Toledo & South Haven | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 51 Traverse City | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 52 Wabash, St. Louis & Pacific | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Commercial Roads | 5 | 3 | ---- | ---- | 163 | ---- | 21 | 5 | ---- | 6 | 43 | 1 |
| ORE AND FOREST ROADS. | | | | | | | | | | | | |
| 1 Buckley & Douglas | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2 Hecla & Torch Lake | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 3 Hobert & Manistee River | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 4 Lake County | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 5 Lake George & Muskegon River | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- |
| 6 Muskegon River & Rose Lake | No | Re | por | t.--- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Ore and Forest Roads | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- |
| Total for all Roads | 5 | 3 | ---- | ---- | 163 | ---- | 21 | 5 | ---- | 6 | 44 | 1 |

a Included with Chicago & Northwestern R'y Report.
b Included with Chicago & West Michigan R. R. Report.
c Included with Flint & Pere Marquette R. R. Report.
d Included with Lake Shore & Michigan Southern R'y Report.
e Included with Michigan Central R. R. Report.

## of Accidents.

| Feet in Frogs. | | | Getting on and off Trains. | | | At Highway Crossings. | | | Miscellaneous Causes. | | | Overhead Obstructions. | | | Stealing Rides. | | | Trespassers and Tramps. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. | Total. |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | 1 | ---- | 2 | 4 | ---- | ---- | ---- | 2 | ---- | 7 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 4 | 57 |
| ---- | 2 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | 7 | 1 | ---- | 2 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 27 |
| ---- | ---- | ---- | ---- | 4 | 2 | ---- | ---- | ---- | ---- | 16 | 2 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 6 | 48 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 7 | 20 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | 2 | ---- | 1 | ---- | ---- | 1 | 1 | 4 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 7 | 30 |
| ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 3 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 | 10 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | 1 | ---- | 3 | 4 | ---- | ---- | 1 | ---- | ---- | 7 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | 8 | 51 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | 3 | 25 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | 1 | 3 | 2 | ---- | ---- | 2 | ---- | 8 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 15 | 49 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | 2 | 1 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | 21 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 |
| ---- | 2 | ---- | 3 | 6 | 7 | ---- | ---- | 5 | ---- | 15 | 9 | ---- | 2 | ---- | ---- | ---- | ---- | ---- | ---- | 28 | 143 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 8 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 |
| ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | 9 | ---- | 13 | 24 | 13 | ---- | 1 | 11 | 6 | 75 | 15 | ---- | 6 | ---- | ---- | ---- | 5 | ---- | 1 | 83 | 509 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ------ |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 |
| ---- | 9 | ---- | 13 | 24 | 13 | ---- | 1 | 11 | 6 | 76 | 15 | ---- | 6 | ---- | ---- | ---- | 5 | ---- | 1 | 83 | 511 |

## 20.—Comparative Summary from Returns of 1880 and 1881.

| | 1880. | 1881. | Increase. | Decrease. | Per Cent of Increase. | Per Cent of Decrease. |
|---|---|---|---|---|---|---|
| | Miles. | Miles. | | | | |
| Length of roads owned | 5,810.08 | 11,465.93 | 5,655.85 | | 97.34 | |
| Length of roads operated | 6,427.34 | 11,528.79 | 5,101.45 | | 79.52 | |
| Length of roads in Michigan | 3,823.95 | 4,252.58 | 428.63 | | 11.20 | |
| Length of double track | 321.29 | 338.13 | 16.84 | | 5.24 | |
| Length of sidings | 1,407.10 | 1,744.02 | 336.92 | | 23.94 | |
| Length computed as single track | 7,538.97 | *10,222.08 | 2,683.11 | | 35.58 | |
| Capital stock paid in | $160,580,320 05 | $239,505,422 14 | $78,925,102 09 | | 49.77 | |
| Capital stock paid in per mile of road | 27,376 48 | 20,890 00 | | 6,486 48 | | 20.02 |
| Total funded debt | 142,212,896 78 | 245,907,462 77 | 103,694,566 04 | | 61.29 | |
| Total floating debt | 11,159,412 17 | 22,593,142 02 | 11,433,729 85 | | 102.40 | |
| Total debt | 153,372,308 90 | 268,500,604 79 | 115,128,295 89 | | 75.06 | |
| Total debt per mile of road | 26,147 63 | 23,408 09 | | 2,739 54 | | 10.05 |
| Total stock and debt | 313,952,628 95 | 507,710,593 69 | 193,757,964 74 | | 61.07 | |
| Total stock and debt per mile of road | 53,524 11 | 44,275 71 | | 9,248 40 | | 17.27 |
| Total cost of road and equipment | 297,388,917 13 | 487,560,525 69 | 190,171,608 56 | | 63.93 | |
| Total cost of road and equipment per mile | 51,149 95 | 42,520 00 | | 8,629 95 | | 16.87 |
| Proportion of cost for Michigan | 159,124,976 69 | 173,682,871 96 | 14,557,895 27 | | 9.14 | |
| *Earnings:* | | | | | | |
| Passenger | $13,336,478 25 | $18,473,153 71 | $5,136,675 46 | | 31.10 | |
| Express | 791,393 75 | 1,304,834 11 | 513,440 36 | | 64 87 | |
| Mail | 1,080,128 59 | 1,698,603 28 | 618,474 69 | | 57.25 | |
| Freight | 41,234,027 64 | 53,239,707 02 | 12,005,679 38 | | 28.14 | |
| Miscellaneous | 208,025 87 | 305,621 92 | 97,596 05 | | 46.91 | |
| Total | $56,650,054 10 | $75,195,845 42 | $18,545,791 32 | | 42.73 | |
| Per mile of road | $3,731 51 | $6,558 19 | | $2,173 32 | | 24 90 |
| Per train mile passenger trains | 1 48.1 | 1 35.5 | | 0 12.6 | | |
| Per train mile freight trains | 1 80.6 | 1 59.5 | | 0 21.1 | | |
| Per train mile all trains | 1 64 | 1 52 | | 0 12 | | |
| Above operating expenses | $24,381,057 38 | $24,924,269 56 | 543,212 20 | | 22.28 | |
| Receipts in addition to earnings | 724,611 22 | 1,126,638 72 | 402,027 50 | | 55.48 | |
| Total income from all sources | $57,374,665 32 | $76,322,484 14 | $18,947,818 82 | | 33.02 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Operating Expenses:* | | | | | | |
| Maintenance of way | $7,868,854 24 | $12,892,459 51 | $5,513,605 27 | | 74 87 | |
| Maintenance of rolling stock | 5,071,258 72 | 6,838,679 06 | 1,767,420 36 | | 82 87 | |
| Conducting transportation | 16,157,001 21 | 24,559,240 00 | 8,402,238 79 | | 52.00 | |
| General expenses, including taxes | 3,671,882 57 | 5,939,229 34 | 2,267,346 77 | | 61.74 | |
| Total operating expenses and taxes | $32,268,996 74 | [b] $50,271,575 46 | $18,002,578 72 | | 55.78 | |
| Per mile of road | $5,025 58 | $4,384 43 | | $641 15 | | 12.78 |
| Per train mile | 0 76.4 | 1 01.6 | 0 25.2 | | | |
| Per cent of earnings | 56 53 | 66 85 | 10 32 | | | |
| Interest and rental—total | $11,251,295 09 | $17,137,469 88 | $5,886,174 79 | | 52.32 | |
| Per mile of road | 1,750 22 | 1,494 64 | | 255 58 | | 14.60 |
| Per train mile | 0 33.17 | 0 34.65 | $0 01.48 | | | |
| Per cent of earnings | 19 86 | 22 79 | 2 93 | | | |
| Operating expenses, interest and rental | $43,520,291 83 | $67,409,045 34 | $23,888,753 51 | | 54.03 | |
| Per mile of road | 6,775 80 | 5,879 07 | | 896 73 | | 11.75 |
| Per train mile | 1 09.57 | 1 36.29 | $0 26.72 | | | |
| Per cent of earnings | 76 39 | 89 66 | 13 27 | | | |
| *Train Mileage:* | | | | | | |
| Passenger trains—miles run | 10,277,902 | 15,843,245 | 5,205,343 | | 50.62 | |
| Freight trains—miles run | 22,945,314 | 33,612,682 | 10,667,368 | | 46.40 | |
| Total miles run by trains earning revenue | [a] 33,915,213 | 49,455,927 | 15,540,714 | | 45.82 | |
| Other trains—miles run | 8,354,563 | 17,004,067 | 8,649,504 | | 10.35 | |
| Total train miles run | 42,269,776 | 66,459,994 | 24,190,218 | | 57.22 | |
| *Traffic:* | | | | | | |
| Passengers—whole number carried | 13,597,200 | 18,914,933 | 5,317,733 | | 39.10 | |
| Passengers—whole number carried 1 mile | 561,982,824 | 824,103,330 | 262,120,506 | | 46.64 | |
| Average rate of fare per mile | $0 02.69 | $0 02.38 | | $0.00.31 | | |
| Average distance traveled by each—miles | 41.25 | 43.57 | 2.32 | | 5.62 | |
| *Freight:* | | | | | | |
| Tons—total carried | 26,830,550 | 37,779,555 | 10,949,005 | | 40.80 | |
| Tons—total carried 1 mile | 4,789,420,778 | 5,753,029,737 | 963,608,964 | | 20.12 | |
| Average rate per ton per mile | 0.00.864 | 001.13 | 000.27 | | | |
| Average haul each ton carried—miles | 122.22 | 152.27 | 30.05 | | 2.45 | |

[a] Does not include Wabash, St. Louis & Pacific Siding.
[a] Does not include 691,997 miles of mileage of mixed trains reported last year.
[b] Does not include expenses of the Detroit, Hillsdale & Southwestern Railroad Company. Not distributed.

## 21.—Comparative Summary of Returns for Six Years, 1876 to 1881, Inclusive.

| | 1876. | 1877. | 1878. | 1879. | 1880. | 1881. |
|---|---|---|---|---|---|---|
| | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. |
| Total length of railroads and branches | 5,387.25 | 5,436.23 | 5,619.93 | 6,166.71 | 5,810.08 | 11,465.93 |
| Total length of railroads in Michigan | 3,410.67 | 3,455.20 | 3,564.26 | 3,657.74 | 3,823.95 | 4,252.58 |
| Total length of double track | 308.15 | 308.15 | 313.48 | 313.48 | 321.29 | 338.13 |
| Total length of sidings | 1,145.02 | 1,147.69 | 1,207.43 | 1,265.30 | 1,407.10 | 1,744.02 |
| Capital stock paid in | $142,033,233 44 | $145,527,661 76 | $148,152,011 16 | $152,748,164 27 | $160,580,320 05 | $239,505,422 14 |
| Capital stock paid in per mile of road | 27,875 44 | 28,371 11 | 28,127 33 | 28,505 77 | 27,376 48 | 20,890 00 |
| Total funded debt | 150,594,090 64 | 149,972,124 03 | 145,536,192 50 | 144,502,954 13 | 142,212,896 73 | 245,907,462 77 |
| Total unfunded debt | 13,952,028 12 | 17,299,297 62 | 15,837,550 76 | 10,494,513 00 | 11,159,412 17 | 22,593,142 02 |
| Total debt | 164,546,118 76 | 167,271,421 65 | 161,373,743 26 | 154,997,467 13 | 153,372,308 90 | 268,500,604 79 |
| Total debt per mile of road | 32,068 37 | 32,610 13 | 30,678 91 | 28,925 53 | 26,147 68 | 23,408 09 |
| Total stock and debt | 306,579,352 20 | 312,799,083 41 | 309,525,754 42 | 307,745,631 30 | 318,952,628 95 | 507,710,593 69 |
| Total stock and debt per mile of road | 59,943 81 | 60,981 24 | 58,802 50 | 57,431 30 | 53,524 11 | 44,275 71 |
| Total cost of roads and equipment | 287,022,838 27 | 292,696,859 13 | 290,090,195 73 | 290,653,655 40 | 297,388,917 13 | 487,560,525 69 |
| Total cost of roads and equipment per mile | 55,176 24 | 57,062 25 | 55,149 38 | 54,241 61 | 51,149 95 | 42,520 00 |
| Proportion of cost for Michigan | 155,114,549 20 | 158,463,713 43 | 154,256,078 61 | 154,426,728 87 | 159,124,976 69 | 173,682,871 96 |
| *Earnings:* | | | | | | |
| From passengers | $11,263,942 94 | $10,255,365 26 | $10,447,268 38 | $10,972,289 24 | $13,336,478 25 | $18,473,153 71 |
| From mails | 1,074,785 42 | 974,663 79 | 1,013,311 56 | 1,033,943 14 | 791,393 75 | 1,698,603 28 |
| From express | 759,724 92 | 715,656 49 | 732,106 37 | 703,617 53 | 1,080,128 59 | 1,304,834 11 |
| From freight | 26,945,752 20 | 27,226,230 30 | 30,121,618 70 | 33,080,934 95 | 41,234,027 64 | 53,239,707 02 |
| From other sources | 339,014 40 | 374,014 12 | 401,834 04 | 147,675 37 | 208,025 37 | 305,621 92 |
| Total earnings | $40,383,219 88 | $39,545,930 06 | $42,716,139 05 | $45,942,860 23 | $56,650,054 10 | $75,195,845 42 |
| Earnings per mile of road | $7,094 39 | $9,830 85 | $7,072 76 | $7,450 14 | $8,731 51 | $6,558 19 |
| Earnings per train mile—passenger trains | 1 41.5 | 1 34.8 | 1 34.74 | 1 36.90 | 1 48.10 | 1 35.05 |
| Earnings per train mile—freight trains | 1 52 | 1 55.1 | 1 54.3 | 1 49.20 | 1 80.60 | 1 59.05 |
| Earnings per train mile—all trains | 1 44.84 | 1 48.7 | 1 49.51 | 1 45.50 | 1 64 | 1 52 |
| *Earnings above operating expenses* | $13,698,116 63 | $13,944,077 02 | $17,082,404 38 | $19,036,174 79 | $24,381,057 36 | $24,924,269 56 |
| Receipts in addition to earnings | $241,789 95 | $206,971 34 | $320,107 62 | $676,750 69 | $724,611 22 | $1,126,638 72 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Total receipts for the year | $40,625,009 83 | $39,752,901 50 | $43,036,246 67 | $46,619,207 05 | $37,374,665 32 | $76,322,484 14 |
| *Expenses:* | | | | | | |
| Operating expenses,—maintenance of way and buildings | $6,151,526 80 | $8,630,173 34 | $6,196,622 99 | $6,555,282 57 | $7,368,854 24 | $12,882,459 51 |
| Operating expenses,—motive power and cars | 4,262,533 65 | 3,633,741 25 | 3,612,503 30 | 3,638,529 07 | 5,071,258 72 | 6,838,579 08 |
| Operating expenses,—conducting transportation | ..... | 12,989,033 76 | 13,134,089 71 | 13,513,807 82 | 16,157,001 21 | 24,559,240 00 |
| Operating expenses,—general expenses | 16,271,040 80 | 2,636,806 89 | 2,645,125 17 | 3,199,065 98 | 3,671,882 57 | 5,039,229 34 |
| Total operating expenses | $26,685,103 25 | $25,601,853 04 | $25,633,731 67 | $26,906,685 44 | $32,268,996 74 | * $50,271,575 46 |
| Operating expenses,—per mile of road | $4,687 88 | $4,421 72 | $4,244 32 | $4,363 21 | $5,025 58 | $4,384 43 |
| Operating expenses,—per train mile | 95 | 96 | 89.72 | 0 85.26 | 0 76.40 | 1 01.60 |
| Operating expenses,—per cent of earnings | 66.07 | 64.74 | 60 | 0 58.56 | 0 56.58 | 0 66.85 |
| Interest and rental,—total | $12,831,194 59 | $12,351,908 64 | $12,288,042 10 | $11,633,327 21 | $11,251,295 09 | $17,137,469 88 |
| Interest and rental,—per mile of road | $2,255 00 | $2,135 30 | $2,034 77 | $1,886 63 | $1,750 22 | $1,494 64 |
| Interest and rental,—per train mile | 46.02 | 46.36 | 42.99 | 0 36 86 | 0 33.17 | 0 34.65 |
| Interest and rental,—per cent of earnings | 31.78 | 31.23 | 28.77 | 25 32 | 19 86 | 22 79 |
| Operating expenses, interest and rental,—total | $39,516,297 84 | $37,953,761 68 | $37,291,776 77 | $38,540,012 65 | $43,520,291 83 | $67,409,045 34 |
| Operating expenses, interest and rental,—per mile of road | $6,942 88 | $6,557 02 | $6,279 09 | $6,249 84 | $6,775 80 | $5,879 07 |
| Operating expenses, interest and rental,—per train mile | 1 41.73 | 1 42.38 | 1 32.71 | 1 22.12 | 1 09.57 | 1 36 29 |
| Operating expenses, interest and rental,—per cent of earnings | 97.86 | 95.97 | 88.77 | 83.88 | 76.39 | 89.66 |
| Average rate per ton per mile | $0 00.982 | $0 01.032 | $0 01.053 | $0 00.92 | $0 00.864 | $0 01.13 |

* Expenses of Detroit, Hillsdale & Southwestern not distributed out.

## 22.—Comparative Statement of Total Cost of Roads and Equipment, and the Proportions for Michigan for the Years 1880 and 1881.

| RAILROADS. | Cost. | | | | Proportion for Michigan. | | | |
|---|---|---|---|---|---|---|---|---|
| | 1880. | 1881. | Increase. | Decrease. | 1880. | 1881. | Increase. | Decrease. |
| 1 Canada Southern Bridge | | | | | | | | |
| 2 Chicago & Canada Southern | $5,176,557 58 | $5,176,557 58 | | | $4,831,963 90 | $4,831,963 90 | | |
| 3 Chicago & Grand Trunk | 14,142,867 63 | 15,186,402 41 | $1,043,535 38 | | 9,600,006 08 | 10,308,345 00 | $708,338 92 | |
| 4 Chicago, Det. & Can. G T. Junction | 2,073,984 67 | 2,073,984 67 | | | 2,073,984 67 | 2,073,984 67 | | |
| 5 Chicago & Northwestern | 74,818,666 43 | 127,043,982 62 | 52,225,316 19 | | 12,187,554 00 | 10,356,259 85 | | $1,831,294 15 |
| 6 Menominee River | | | | | | | | |
| 7 Escanaba & Lake Superior | | | | | | | | |
| 8 Chicago, Saginaw & Canada | 618,000 00 | 667,830 00 | 49,830 00 | | 618,000 00 | 667,830 00 | 49,830 00 | |
| 9 Chicago & West Michigan R. R. | | | | | | | | |
| 10 Chicago & West Michigan R'y | 9,266,797 30 | 8,800,942 28 | | $465,855 02 | 9,266,797 30 | 8,800,942 28 | | 465,855 02 |
| 11 White River | 57,646 46 | 122,048 75 | 64,402 29 | | 57,646 46 | 122,048 75 | 64,402 29 | |
| 12 Detroit, Grand Haven & Milwaukee | 6,700,000 00 | 6,700,000 00 | | | 6,700,000 00 | 6,700,000 00 | | |
| 13 Detroit, Hillsdale & Southwestern | 1,369,351 73 | 1,359,989 75 | | 9,361 98 | 1,369,351 73 | 1,359,989 75 | | 9,361 98 |
| 14 Detroit, Lansing & Northern | 7,549,695 04 | 7,545,695 04 | | 4,000 00 | 7,549,695 04 | 7,545,695 04 | | 4,000 00 |
| 15 Saginaw & Grand Rapids | | 70,000 00 | 70,000 00 | | | 70,000 00 | 70,000 00 | |
| 16 Detroit, Mackinaw & Marquette | 257,634 34 | 12,041,892 01 | 11,784,257 67 | | 257,634 34 | 12,041,892 01 | 11,785,257 67 | |
| 17 Flint & Pere Marquette | 9,671,958 90 | 11,361,845 01 | 1,689,886 11 | | 9,671,958 90 | 11,361,841 01 | 1,689,882 11 | |
| 18 Manistee | | 367,069 07 | 367,069 07 | | | 367,069 07 | 367,069 07 | |
| 19 Saginaw & Clare county | 113,206 25 | 142,316 38 | 29,109 93 | | 113,206 45 | 142,316 38 | 29,109 93 | |
| 20 Saginaw & M't Pleasant | 112,864 00 | 130,629 92 | 17,765 92 | | 112,864 00 | 130,629 92 | 17,765 92 | |
| 21 Fort Wayne & Jackson | 2,712,200 00 | 2,719,579 53 | 7,379 53 | | 1,247,612 00 | 1,251,006 58 | 3,294 58 | |
| 22 Grand Haven | | | | | | | | |
| 23 Grand Rapids & Indiana | 13,267,016 68 | 13,267,016 68 | | | 11,147,884 51 | 11,148,274 11 | 389 60 | |
| 24 Allegan & Southeastern | 250,700 00 | 250,700 00 | | | 250,700 00 | 250,700 00 | | |
| 25 Grand Rapids, Newaygo & Lake Shore | | | | | | | | |
| 26 Lake Shore & Michigan Southern | 79,978,000 00 | 82,650,000 00 | 2,672,000 00 | | 18,962,344 55 | 16,942,886 29 | 2,019,458 26 | |
| 27 Detroit, Hillsdale & Southwestern | | | | | | | | |
| 28 Detroit, Monroe & Toledo | 1,293,600 00 | 1,381,600 00 | 88,000 00 | | 1,137,285 36 | 1,196,381 88 | 59,096 52 | |
| 29 Kalamazoo, Allegan & Grand Rapids | 1,450,000 00 | 1,450,000 00 | | | 1,450,000 00 | 1,450,000 00 | | |
| 30 Kalamazoo & White Pigeon | 610,000 00 | 610,000 00 | | | 610,000 00 | 610,000 00 | | |
| 31 Northern Central Michigan | 1,357,000 00 | 1,357,000 00 | | | 1,357,000 00 | 1,357,000 00 | | |
| 32 Marquette, Houghton & Ontonagon | 9,002,768 58 | 9,175,883 47 | 173,114 89 | | 9,002,768 58 | 9,175,883 47 | 173,114 89 | |
| 33 Michigan Air Line R'y | 481,833 97 | 490,843 42 | 9,009 45 | | 481,833 97 | 490,843 42 | 9,009 45 | |
| 34 Michigan Central | 29,254,977 49 | 29,480,815 77 | 225,838 28 | | 23,945,740 83 | 24,124,340 11 | 178,599 28 | |
| 35 Detroit & Bay City | 4,462,932 41 | 3,541,038 89 | | 921,893 52 | 4,462,932 41 | 3,541,038 89 | | 921,893 52 |
| 36 Grand River Valley | 2,847,946 66 | 2,852,596 66 | 4,650 00 | | 2,847,946 66 | 2,852,596 66 | 4,650 00 | |
| 37 Jackson, Lansing & Saginaw | 6,921,485 18 | 6,929,286 77 | 7,801 59 | | 6,921,485 18 | 6,929,286 77 | 7,801 59 | |
| 38 Kalamazoo & South Haven | 899,935 24 | 1,150,335 24 | 250,400 00 | | 899,935 24 | 1,150,335 24 | 250,400 00 | |
| 39 Michigan Air Line R. R | 3,166,759 00 | 3,166,759 00 | | | 3,011,797 48 | 3,011,623 14 | | 174 34 |
| 40 Michigan Midland & Canada | 585,993 79 | 586,342 02 | 348 23 | | 585,993 79 | 586,342 02 | 348 23 | |
| 41 Mineral Range | 400,182 97 | 398,294 48 | | 1,888 49 | 400,182 97 | 398,294 48 | | 1,888 49 |
| 42 Paw Paw | 79,815 00 | 79,815 00 | | | 79,815 00 | 79,815 00 | | |
| 43 Port Huron & Northwestern | 674,413 01 | 1,983,129 36 | 1,308,716 35 | | 674,413 01 | 1,983,129 36 | 1,308,716 35 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 44 Saginaw Bay & Northwestern | 365,000 00 | 224,235 25 | | 140,764 75 | 365,000 00 | 224,235 25 | | 140,764 75 |
| 45 Saginaw Valley & St. Louis | 681,427 60 | 681,427 60 | | | 681,427 60 | 681,427 60 | | |
| 46 St. Joseph Valley | | 98,698 77 | 98,698 77 | | | 98,698 77 | 98,698 77 | |
| 47 Tawas & Bay County | 55,335 86 | 102,000 00 | 46,664 14 | | 55,335 86 | 102,000 00 | 46,664 14 | |
| 48 Toledo, Ann Arbor & Grand Trunk | 576,154 64 | 695,157 18 | 119,002 54 | | 513,529 10 | 638,177 07 | 64,647 97 | |
| 49 Toledo, Canada Southern & Detroit | 2,993,975 11 | 3,064,951 03 | 71,015 92 | | 2,533,116 10 | 2,593,200 52 | 60,084 42 | |
| 50 Toledo & South Haven | 62,427 19 | 62,427 19 | | | 62,427 19 | 62,427 19 | | |
| 51 Traverse City | 459,164 54 | 459,164 54 | | | 459,164 54 | 459,164 54 | | |
| 52 Wabash, St. Louis & Pacific | | 119,237,681 17 | 119,237,681 17 | | | 2,807,430 79 | 2,807,430 79 | |
| Commercial roads | $296,822,274 83 | $486,938,004 51 | $191,659,493 42 | $1,543,763 76 | $158,558,334 41 | $173,077,350 78 | | |
| ORE AND FOREST ROADS. | | | | | | | | |
| 1 Buckley & Douglas | | $45,618 89 | $45,618 89 | | | $45,618 89 | $45,618 89 | |
| 2 Hecla & Torch Lake | $185,560 93 | 187,560 93 | 2,000 00 | | $185,560 93 | 187,560 93 | 2,000 00 | |
| 3 Hobart & Manistee River | 77,716 76 | 77,716 76 | | | 77,716 76 | 77,716 76 | | |
| 4 Lake County | 35,000 00 | 50,000 00 | 15,000 00 | | 35,000 00 | 50,000 00 | 15,000 00 | |
| 5 Lake George & Muskegon River | 242,959 21 | 243,624 60 | 665 39 | | 242,959 21 | 243,624 60 | 665 39 | |
| 6 Muskegon River & Rose Lake | 25,405 38 | | | $25,405 38 | 25,405 38 | | | |
| Ore and forest roads | $566,642 28 | $604,521 18 | $63,284 28 | $25,405 38 | $566,642 28 | $604,521 18 | | |
| Total of all roads | $297,388,917 13 | $487,542,525 69 | $191,722,777 70 | | $159,124,976 69 | $173,682,871 96 | | |

## 23.—*Comparative Statement of Indebtedness, and Stock and Debt for Years 1880-81.

| RAILROADS. | Indebtedness, 1880. | Indebtedness, 1881. | Increase. | Decrease. | Stock and Debt, 1880. | Stock and Debt, 1881. | Increase. | Decrease. |
|---|---|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | $1,000,000 00 | $1,000,000 00 | | | $1,450,000 00 | $1,450,000 00 | | |
| 2 Chicago & Canada Southern | 3,882,753 43 | 4,069,427 05 | $186,673 62 | | 6,550,153 43 | 6,736,827 05 | $186,673 62 | |
| 3 Chicago & Grand Trunk | 7,569,932 00 | 8,918,418 58 | a 794,400 00<br>1,348,486 58 | | 14,169,932 00 | 15,518,418 58 | 1,348,486 58 | |
| 4 Chicago, Detroit & Canada G'd Trunk Junc. | 1,095,000 00 | 1,095,000 00 | | | 2,190,000 00 | 2,190,000 00 | | |
| 5 Chicago & Northwestern | 42,058,241 74 | 64,913,841 77 | a 21,401,000 00<br>22,855,600 03 | | 78,877,742 20 | 123,402,702 86 | b 21,669,360 63<br>44,524,960 66 | |
| 6 Menominee River | | | | | b 10,750 00 | | | |
| 7 Escanaba & Lake Superior | | | | | | | | |
| 8 Chicago, Saginaw & Canada | 655,000 00 | 655,000 00 | | | 941,000 00 | 941,000 00 | | |
| 9 Chicago & West Michigan R. R. | 1,259,379 96 | 3,344,761 00 | a 1,831,500 00<br>2,085,381 04 | | 8,760,379 96 | 10,141,594 33 | 1,381,214 37 | b $704,166 67 |
| 10 Chicago & West Michigan R'y | | | | | | | | |
| 11 White River | | 15,489 19 | 15,489 19 | | 76,000 00 | 122,489 19 | b 31,000 00<br>46,489 19 | |
| 12 Detroit, Grand Haven & Milwaukee | 5,470,148 00 | 5,489,759 57 | 19,611 57 | | 6,970,148 00 | 6,989,759 57 | 19,611 57 | |
| 13 Detroit, Hillsdale & Southwestern | 32,936 35 | 12,040 00 | | $20,896 35 | 1,376,936 35 | 1,356,040 00 | | 20,896 55 |
| 14 Detroit, Lansing & Northern | 3,411,322 70 | 3,543,440 40 | a 128,000 00<br>132,117 70 | | 7,740,302 70 | 7,872,340 40 | 132,037 70 | b 80 00 |
| 15 Saginaw & Grand Rapids | | | | | | 70,000 00 | b 70,000 00<br>70,000 00 | |
| 16 Detroit, Mackinaw & Marquette | | 9,060,000 00 | a 9,060,000 00<br>9,060,000 00 | | | 15,310,000 00 | b 6,250,000 00<br>15,310,000 00 | |
| 17 Flint & Pere Marquette | 3,367,158 90 | 5,265,972 14 | a 1,454,401 10<br>1,898,813 24 | | 9,671,958 90 | 11,765,972 14 | b 195,200 00<br>2,094,013 24 | |
| 18 Manistee | | | | | | 368,605 31 | b 368,605 31<br>368,605 31 | |
| 19 Saginaw & Clare County | | | | | 1,035 00 | 1,035 00 | | |
| 20 Saginaw & M't Pleasant | 73,459 95 | | | 73,459 95 | 113,561 91 | 40,501 96 | b 400 00 | 73,059 95 |
| 21 Fort Wayne & Jackson | | | | | 2,712,200 00 | 2,719,579 73 | b 7,379 73<br>7,379 73 | |
| 22 Grand Haven | | | | | | | | |
| 23 Grand Rapids & Indiana | 10,326,321 54 | 10,535,302 26 | 208,980 72 | | 15,311,402 76 | 15,520,302 26 | 208,899 50 | b 81 22 |
| 24 Allegan & Southeastern | | | | | 250,700 00 | 250,700 00 | | |
| 25 Grand Rapids, Newaygo & Lake Shore | | | | | | | | |
| 26 Lake Shore & Michigan Southern | 35,665,000 00 | 39,046,407 30 | a 1,250,000 00<br>3,381,407 30 | | 85,665,000 00 | 89,046,407 30 | 3,381,407 30 | |
| 27 Detroit, Hillsdale & Southwestern | | | | | | | | |
| 28 Detroit, Monroe & Toledo | 924,000 00 | 924,000 00 | | | 1,338,000 00 | 1,338,190 00 | | |
| 29 Kalamazoo, Allegan & Grand Rapids | 840,000 00 | 840,000 00 | | | 1,450,000 00 | 1,450,000 00 | | |
| 30 Kalamazoo & White Pigeon | 600,000 00 | 600,000 00 | | | 830,900 00 | 830,900 00 | | |
| 31 Northern Central Michigan | 1,525,000 00 | 1,525,000 00 | | | 2,135,000 00 | 2,135,000 00 | | |
| 32 Marquette, Houghton & Ontonagon | 4,215,028 68 | 2,247,605 08 | c 33,076 40 | | a 2,000,500 00<br>1,967,423 60 | 8,780,655 35 | 6,813,231 75 | 1,967,423 60 |
| 33 Michigan Air Line R'y | 181,833 97 | 172,983 46 | | 8,850 51 | 481,838 97 | 472,983 46 | | 8,850 51 |
| 34 Michigan Central | 11,291,000 00 | 12,271,756 62 | 980,756 62 | | 30,029,204 00 | 31,009,960 62 | 980,756 62 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35 Detroit & Bay City | 4,075,510 84 | 4,000,000 00 | a 1,670,000 00 | *1,745,510 84<br>75,510 84 | 5,401,260 84 | 6,000,000 00 | b 674,250 00<br>508,789 16 | |
| 36 Grand River Valley | 1,500,000 00 | 1,500,000 00 | | | 1,991,200 00 | 1,991,200 00 | | |
| 37 Jackson, Lansing & Saginaw | 3,421,000 00 | 4,320,000 00 | a 899,000 00<br>899,000 00 | | 5,398,290 00 | 6,306,790 00 | b 9,500 00<br>908,500 00 | |
| 38 Kalamazoo & South Haven | 710,000 00 | 710,000 00 | | | 785,000 00 | 1,035,400 00 | b 250,400 00<br>250,400 00 | |
| 39 Michigan Air Line R. R. | 2,100,000 00 | 2,100,000 00 | | | 2,450,000 00 | 2,444,950 00 | | b 5,050 00<br>5,050 00 |
| 40 Michigan Midland & Canada | 479,197 58 | 503,059 52 | 23,861 94 | | 779,197 58 | 803,059 52 | 23,861 94 | |
| 41 Mineral Range | 291,126 14 | 277,926 46 | | a 1,100 00<br>13,199 68 | 408,481 14 | 359,426 46 | | 13,199 68 |
| 42 Paw Paw | 3,000 00 | 3,000 00 | | | 78,000 00 | 78,000 00 | | |
| 43 Port Huron & Northwestern | 617,383 79 | 1,462,386 53 | a 230,000 00<br>845,002 74 | | 895,513 79 | 1,982,386 53 | b 241,840 00<br>1,086,842 74 | |
| 44 Saginaw Bay & Northwestern | 119,325 74 | 204,959 04 | a 120,000 00<br>85,633 30 | c 34,366 70 | 419,325 74 | 224,959 04 | | b 280,000 00<br>194,366 70 |
| 45 Saginaw Valley & St. Louis | 462,496 12 | 465,779 85 | 3,283 73 | | 727,300 13 | 721,079 85 | 6,220 28 | 9,501 01 |
| 46 St. Joseph Valley | | 45,298 77 | a 25,000 00<br>45,298 77 | | | 98,698 77 | b 53,400 00<br>98,698 77 | |
| 47 Tawas & Bay County | 54,912 45 | 97,995 00 | 43,082 55 | | 56,927 45 | 97,995 00 | 41,067 55 | b 2,015 00 |
| 48 Toledo, Ann Arbor & Grand Trunk | 809,008 61 | 1,359,644 85 | a 510,000 00<br>550,636 24 | | 1,268,248 12 | 1,818,884 36 | 550,636 24 | |
| 49 Toledo, Canada Southern & Detroit | 2,699,590 88 | 2,865,145 08 | 165,554 20 | | 4,247,253 38 | 4,412,807 58 | 165,554 20 | |
| 50 Toledo & South Haven | 15,000 00 | 15,000 00 | | | 66,659 27 | 15,000 00 | | b 51,659 27 |
| 51 Traverse City | 368,526 51 | 384,818 26 | 16,291 75 | | 573,526 51 | 589,818 26 | 16,291 75 | |
| 52 Wabash, St. Louis & Pacific | | 72,383,946 78 | a 66,291,858 27<br>72,383,946 78 | | | 122,338,646 78 | b 49,954,700 00<br>122,338,646 78 | |
| **ORE AND FOREST ROADS.** | | | | | | | | |
| 1 Buckley & Douglas | | 40,000 00 | a 40,000 00<br>40,000 00 | | | 53,100 00 | b 13,100 00<br>53,100 00 | |
| 2 Hecla & Torch Lake | 85,560 93 | 87,560 93 | 2,000 00 | | 185,560 93 | 187,560 93 | 2,000 00 | |
| 3 Hobart & Manistee River | 25,249 77 | 31,449 79 | 6,200 02 | | 85,249 77 | 91,449 79 | 6,200 02 | |
| 4 Lake County | | | | | 35,000 00 | | | b 35,000 00 |
| 5 Lake George & Muskegon River | 91,902 32 | 96,429 51 | 4,527 18 | | 190,402 32 | 194,929 51 | 4,527 18 | |
| 6 Muskegon River & Rose Lake | No Report. | | | | 25,405 38 | | | |

a Funded Debt. b Stock. c Floating Debt.

* In the Increase and Decrease columns the figures of a group with indices attached, is the proportion of whole amount of such increase or decrease belonging to the account indicated.

## 24.—Comparative Statement of Mileage of Track for the Years 1880 and 1881.

| RAILROADS. | Miles Owned. 1880. | Miles Owned. 1881. | Miles Operated. 1880. | Miles. Operated. 1881. | Miles of Track in Michigan. 1880. | Miles of Track in Michigan. 1881. | Increase or Decrease of Track in Michigan. Increase. | Decrease. |
|---|---|---|---|---|---|---|---|---|
| 1 Canada Southern Bridge | 3.80 | 3.80 | 4.36 | 4.36 | 3.66 | 3.66 | | |
| 2 Chicago & Canada Southern | 67.60 | 67.60 | 67.60 | 67 60 | 63.10 | 63.10 | | |
| 3 Chicago & Grand Trunk | 330.00 | 330.50 | 330.00 | 330.50 | 224.00 | 224.00 | | |
| 4 Chicago, Detroit & Canada Grand Trunk Junction | 59.37 | 59.37 | 59 37 | 59.37 | 59.37 | 59.37 | | |
| 5 Chicago & Northwestern | 1,227.33 | 3,218.47 | 1,673.62 | 3,218.47 | 210.11 | 217.92 | 7.81 | |
| 6 Menominee River | | | | | | | | |
| 7 Escanaba & Lake Superior | | | | | | | | |
| 8 Chicago, Saginaw & Canada | 38.00 | 38.00 | 38.00 | 38.00 | 38.00 | 38.00 | | |
| 9 Chicago & West Michigan R. R. | | | | | | | | |
| 10 Chicago & West Michigan R'y | a 364.50 | 353.60 | 370.52 | 366.60 | 353.60 | 366.60 | | 11.80 |
| 11 White River | 5.12 | 13 00 | | | 13.00 | | 7.88 | |
| 12 Detroit, Grand Haven & Milwaukee | 189.00 | 189.00 | 189.00 | 189.00 | 189 00 | 189.00 | | |
| 13 Detroit, Hillsdale & Southwestern | 64.80 | 64.80 | 64.80 | 64 80 | 64.80 | 64.80 | | |
| 14 Detroit, Lansing & Northern | 221.57 | 221.57 | 225.57 | 225.57 | 221.57 | 221.57 | | |
| 15 Saginaw & Grand Rapids | | 3.60 | | | | 3 60 | 3.60 | |
| 16 Detroit, Mackinaw & Marquette | 20 00 | 151.90 | 20 00 | 30.00 | 20.00 | 151.90 | 131.90 | |
| 17 Flint & Pere Marquette | 302.69 | 322.81 | 317.71 | 317.71 | 302.49 | 322.81 | 5.30 | |
| 18 Manistee | | 25.53 | | | | 25.53 | 25.53 | |
| 19 Saginaw & Clare County | | | | | | | | |
| 20 Saginaw & M't Pleasant | 15.02 | | | | 15 02 | | | |
| 21 Fort Wayne & Jackson | 100.00 | 100.00 | 100.00 | 100.00 | 46.00 | 46.00 | | |
| 22 Grand Haven | b | | | | | | | |
| 23 Grand Rapids & Indiana | 332.50 | 332.50 | 332.50 | 455.77 | 279 39 | 279.39 | | |
| 24 Allegan & Southeastern | 11.50 | 11.50 | 11.50 | | 11.50 | 11.50 | | |
| 25 Grand Rapids, Newaygo & Lake Shore | b | | | | | | | |
| 26 Lake Shore & Michigan Southern | 864 87 | 864.87 | 1,177.67 | 1,177.67 | 403.82 | 403.82 | | |
| 27 Det., Hillsdale & Southwestern | | | | | | | | |
| 28 Detroit, Monroe & Toledo | 62.36 | 62.36 | | | | | | |
| 29 Kalamazoo, Allegan & G. Rapids | 58.42 | 58.42 | | | | | | |
| 30 Kalamazoo & White Pigeon | 36 57 | 36.57 | | | | | | |
| 31 Northern Central Michigan | 61 14 | 61.14 | | | | | | |
| 32 Marquette, Houghton & Ontonagon | 87.13 | 90.51 | 87.13 | 90.51 | 87.13 | 90.51 | 3.38 | |
| 33 Michigan Air Line R'y | 36.00 | 35.00 | 36.00 | 35.00 | 36.00 | 35 00 | | 1.00 |
| 34 Michigan Central | 270 00 | 270.07 | 803.72 | 949.59 | 221 00 | 221 00 | | |
| 35 Detroit & Bay City | 146.05 | 147.25 | 149.05 | | 146.05 | 147 25 | 1.20 | |
| 36 Grand River Valley | 84.00 | 84.00 | 84.00 | | 84.00 | 84 00 | | |
| 37 Jackson, Lansing & Saginaw | 236.00 | 294.80 | 236.00 | | 236.00 | 294.80 | 58.80 | |
| 38 Kalamazoo & South Haven | 40.00 | 40 00 | 40 00 | | 40.00 | 40.00 | | |
| 39 Michigan Air Line R. R. | 114.72 | 114.72 | 114.72 | | 109.10 | 109.10 | | |
| 40 Michigan Midland and Canada | 14.68 | 14.68 | 14.68 | 14.68 | 14.68 | 14.68 | | |
| 41 Mineral Range | 12.50 | 12.50 | 12.50 | 12.50 | 12.50 | 12.50 | | |
| 42 Paw Paw | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | | |
| 43 Port Huron & Northwestern | 71.00 | 151.00 | 71.00 | 151.00 | 71.00 | 151.00 | 80 00 | |
| 44 Saginaw Bay & Northwestern | 27.75 | 30 00 | 27.75 | 30.00 | 27.75 | 30.00 | 2.25 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 45 Saginaw Valley & St. Louis | 29.00 | 29.00 | 38.60 | 38.60 | 29.00 | 29.00 | ..... | ..... |
| 46 St Joseph Valley | ..... | 10.00 | ..... | 10.00 | ..... | 10.00 | 10.00 | ..... |
| 47 Tawas & Bay County | 21 00 | 23.00 | 21.00 | 23.00 | 21.00 | 23.00 | 2 00 | ..... |
| 48 Toledo, Ann Arbor & Grand Trunk | 45.70 | 61 00 | 45.70 | 61.00 | 41.00 | 56.00 | 15.00 | ..... |
| 49 Toledo, Canada Southern & Detroit | 55.87 | 55 87 | 55.87 | 55.87 | 47.27 | 47.27 | ..... | ..... |
| 50 Toledo & South Haven | 9 00 | 9.00 | 9.00 | 9.00 | 9 00 | 9 00 | ..... | ..... |
| 51 Traverse City | 26 00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | ..... | ..... |
| 52 Wabash, St. Louis & Pacific | ..... | 3,325.00 | ..... | 3,325.00 | ..... | 78.28 | 78 28 | ..... |
| Commercial roads | 5,767.46 | 11,418.81 | 6,384.22 | 11,481.17 | 3,784.83 | 4,204.96 | 432.98 | 12.80 |
| ORE AND FOREST ROADS. | | | | | | | | |
| 1 Buckley & Douglas | ..... | 8.00 | ..... | 8.00 | ..... | 8.00 | 8.00 | ..... |
| 2 Hecla & Torch Lake | 4.00 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 | ..... | ..... |
| 3 Hobart & Manistee River | 9.24 | 9 24 | 9.24 | 9 24 | 9.24 | 9.24 | ..... | ..... |
| 4 Lake County | 3.75 | 6.00 | 3.75 | 6.00 | 3.75 | 6.00 | 2.25 | ..... |
| 5 Lake George & Muskegon River | 18 13 | 19.88 | 18.13 | 19.88 | 18.13 | 19.88 | 1.75 | 7.50 |
| 6 Muskegon River & Rose Lake | 7.50 | ..... | 7.50 | ..... | 7.50 | ..... | ..... | ..... |
| Ore and forest roads | 42.62 | 47.62 | 43.12 | 47.62 | 43.12 | 47 62 | 12.00 | 7.50 |
| Total for all roads | 5,810.08 | 11 465.93 | 6,427.34 | 11,528.79 | 3,823 95 | 4,252 58 | 428.63 | Increase. |

[a] Includes Grand Haven and Grand Rapids, Newaygo & Lake Shore Railroads.
[b] Included with Chicago & West Michigan R'y.

# COMPANY REPORTS.

1881.

# REPORTS OF RAILROAD COMPANIES.

## ANNUAL REPORT

OF THE

## CANADA SOUTHERN BRIDGE COMPANY,

*For the Year ending December 31, 1881.*

### GENERAL REMARKS.

The Canada Southern Railway Company operates the property of the Canada Southern Bridge Company, as an integral part of its system, receiving all earnings and making all disbursements. This report is a strict mileage *pro rata* division of the earnings and expenses of said Canada Southern Railway, to which the Canada Southern Bridge Company is entitled. The stock and bonds of the Canada Southern Bridge Company are owned by the Canada Southern Railway Company.

### OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES TILLINGHAST, Buffalo, N. Y.
*Secretary*, C. F. COX, New York.
*Treasurer*, C. VANDERBILT, New York.
*General Manager*, W. P. TAYLOR, Buffalo, N. Y.
*Division Superintendent*, E. P. MURRAY, Toledo, Ohio.
*Chief Engineer*, A. R. TREW, St. Thomas, Ont.
*Auditor*, R. J. PELTON, St. Thomas, Ont.
*General Passenger Agent*, W. H. HURLBURT, Buffalo, N. Y.
*General Freight Agent*, W. H. PERRY, Buffalo, N. Y.

## DIRECTORS.

James Tillinghast, Buffalo, N. Y.
Edward A. Wicks, New York.
Augustus Schell, New York.
Wm. K. Vanderbilt, New York.
Edwin D. Worcester, New York.
Samuel F. Barger, New York.
Wm. L. Scott, Erie, Pa.
James W. Converse, Boston, Mass.
Sidney Dillon, New York.

Term expires June 3d, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 13 |
| Number of stockholders in Michgan at same date, | None. |
| Amount of full-paid stock held in Michigan at same date, | None. |

Date of Annual meeting of stockholders, June 3d.
Fiscal year of company ends December 31st.
General offices of the company are located at Grosse Isle, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $37,705 22 |
| Total expense, including taxes, | | 29,883 49 |
| Net income, | | $7,821 73 |
| Interest on funded debt, | $70,000 00 | |
| Balance for the year,—deficit, | 62,178 27 | |
| Balance (profit and loss) last year, | 118,101 39 | |
| Items not included in above as follows: | | |
| Construction expenditure, | 3,734 84 | |
| Balance forward to next year, | | 184,014 50 |
| | $184,014 50 | $184,014 50 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $450,000 00 |
| Par value of shares, | $100 00 | |
| Average price received per share, | $100 00 | |
| Amount issued [number of shares 4,500], | | 450,000 00 |
| Amount paid in on common, | | 450,000 00 |
| Total amount paid in as per books of the company, | | 450,000 00 |
| Amount paid in per mile of road owned by Company [3.8 miles], | | 118,421 05 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due ——— ——, interest 7 per cent, payable ——— ——), | | $1,000,000 |
| Total amount of funded debt, | | $1,000,000 |
| Total debt liabilities, | | $1,000,000 |
| Amount of debt liabilities per mile of road [3.8 miles], | $263,157.76 | |

## COST OF ROAD AND EQUIPMENT.

This property forms a portion of the Canada Southern Railroad system and the cost cannot be given separately from that of the road.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Passenger and freight stations, wood-sheds, and water stations, | $559 11 |
| Any other expenditures charged to property account (specifying the same): | |
| New sidings, | $3,175 73 |
| Total charges to property account during the year, | $3,734 84 |
| Net addition to property account for the year, | 3,734 84 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $7,974 66 | |
| From through passengers, | | |
| From express and baggage, | 324 96 | |
| From mails, | 349 56 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $8,649 18 |
| Earnings per train mile run [13,961 miles], | $0 61.96 | |

### EARNINGS, FREIGHT

| | | |
|---|---|---|
| From local traffic, | $29,021 34 | |
| From through traffic, | | |
| From other sources, freight department, | 34 70 | |
| Total earnings, freight department, | | $29,056 04 |

| | | |
|---|---|---|
| Earnings per train mile run [26,460 miles], | $1 09.83 | |
| Total transportation earnings, | | $37,705 22 |
| Earnings per mile of road operated [4.36 miles], | $8,647 98 | |
| Earnings per train mile run, from all trains earning revenue [40,421 miles], | $0 93.28 | |
| Proportion of earnings for Michigan (3.66 miles), | 31,651 60 | |
| Total income from all sources, | | $37,705 22 |
| Proportion of income for Michigan, | 31,651 60 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $1,988 47 |
| Renewal of ties, | 1,192 34 |
| Repairs of bridges, including culverts and cattle guards, | 407 93 |
| Repairs of fences, road-crossings, and signs, | 129 28 |
| Repairs of buildings, | 181 82 |
| Total, | $3,899 84 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $901 15 |
| Repairs of passenger cars, | 651 03 |
| Repairs of freight cars, | 3,043 79 |
| Total, | $4,595 97 |

CLASS 3.—*Conducting Transportion.*

| | |
|---|---|
| Fuel for locomotives, | $2,779 91 |
| Water-supply, | 395 68 |
| Oil and waste, | 451 73 |
| Locomotive service, | 1,360 99 |
| Passenger train service, | 401 14 |
| Passenger train supplies, | 59 49 |
| Freight train service, | 1,106 95 |
| Freight train supplies, | 186 36 |
| Mileage of freight cars (debit balance), | 2,289 93 |
| Telegraph expenses (maintenance and operating) | 406 71 |
| Damage and loss of freight and baggage, | 175 24 |
| Damages to property and cattle, | 20 11 |
| Personal injuries, | 67 59 |
| Agents and station service, | 1,799 04 |
| Station supplies, | 348 39 |
| Total, | $11,849 26 |

### CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $394 29 |
| Salaries of clerks in general offices, | 435 04 |
| Law expenses, | 302 54 |
| Insurance, | 4 48 |
| Stationery and printing, | 141 80 |
| Outside agencies and advertising, | 1,776 72 |
| Contingencies, | 5,585 63 |
| Taxes in Michigan, | 897 92 |
| Total, | $9,538 42 |

### RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $3,899 84 |
| Maintenance of motive power and cars, | 4,595 97 |
| Conducting transportation, | 11,849 26 |
| General expenses, including taxes, | 9,538 42 |
| Total operating expenses and taxes, | $29,883 49 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road [4.36 miles], | $6,854 00 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [40,421 miles], | $0 93.23 | |
| Proportion of operating expenses and taxes for Michigan, [3.66 miles], | 25,085 64 | |
| Per centage of expenses to earnings, | 79.25 | |
| Net earnings per mile of road, | 1,793 98 | |
| Net earnings per train mile, | $0 19.35 | |

### DESCRIPTION OF ROAD.

State when the road or portions thereof were opened for public use:
From the Canada mainland to the westerly bank of the north channel of the Detroit River, September, 1873.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 3 66 | |
| Length completed in Canada, | 70 | |
| Total length completed, | | 4 36 |
| Total length of road belonging to this company, | | 4 36 |
| Total length of road belonging to this company in Michigan, | 3 66 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 11 54 |
| Same in Michigan, | 11 54 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 15 90 |

| | Miles. | 100ths. | Miles. | 100ths. |
|---|---|---|---|---|
| Same in Michigan, | 15 | 20 | | |
| Gauge of track, 4 feet, 8½ inches. | | | | |
| Total length of track laid with steel rails, weight per yard, 60 lbs., | 3 | 66 | | |
| Total length of track laid with iron rails, weight per yard, 60 lbs., | 11 | 54 | | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 2; Aggregate length, feet, | | 2,628 |
| Wooded trestles, number of, 5; Aggregate length, feet, | | 1,080 |
| Total, | 7 | 3,708 |
| Number of crossings of highways at grade in this State without protection, | | 1 |
| Number of crossings over railroad, | | 1 |
| Number of highway bridges 18 feet above track, | | 1 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 2 |
| Same in Michigan, | 2 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 3.66 |
| What is the average cost per rod? | Unknown. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 1 |
| Average length of sections, | 3 miles. |
| Average number of men in each section gang, | 11 |
| Number of new ties put in whole line during the year, | 1,464 |
| Number of new ties put in track in Michigan, | 1,464 |
| Average number of new ties per mile of road, | 400 |

ROLLING STOCK.

Equipment supplied by Canada Southern Railway.

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 13,961 |
| Miles run by freight trains during the year, | 26,460 |
| Total mileage of trains earning revenue, | 40,421 |
| Total train mileage, | 40,421 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 7 |
| Average number of cars in freight trains, | 28 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | | | |
| Number of local passengers carried, | | | |
| Total number of passengers carried one mile, | 113,250 | | |
| Total passenger mileage, or passengers carried one mile, | 493,770 | | |
| Average distance traveled by each passenger, | | 4.36 | |
| Average amount received from each passenger, | | | $0.10. |
| Highest rate of fare per mile, for any distance, | | | 0.02.29 |
| Lowest rate of fare per mile, for any distance, | | | 0.02.29 |
| Average rate of fare per mile, for through passengers, | | | 0.02.29 |
| Average rate of fare per mile, for local passengers, | | | 0.02.29 |
| Average rate of fare per mile, for all passengers, | | | 0.02.29 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | | | |
| Number of tons of local freight carried, | 1,764,735 | | |
| Total tons of freight carried, | 1,764,735 | | |
| Total freight mileage, or tons carried one mile, | 7,694,24 | | |
| Average ton haul for all freight, | | 4.36 | |
| Average amount received for each ton haul, | | | $0.01.64 |
| Average rate per ton per mile, received for all freight, | | | 0.00.37 |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company; taking freight at stations and paying once and one-half first class freight rates.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Canada Southern Line, E. & N. S. Despatch, Blue Line, M. D. T. Co., Hoosac Tunnel Line.

All these lines, except M. D. T. Co., are owned by the roads over which they run, they receiving all earnings and each bearing its proportion of expenses. The M. D. T. Co. is a corporate company, and receives commission on business. No preference given.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads,* for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

Nothing.

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Wagner drawing-room and sleeping cars run at customary rates.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Nothing.

*Telegraph.*

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Canada Southern Railway owns telegraph along line.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

### KILLED.

July 24. Samuel Blouk, pony conductor, Grosse Isle, in attempting to pull a pin while cars were in motion, stubbed his foot against guard-rail and fell on track; several cars passed over his legs and hip, fatally injuring him. He lived about two hours.

INJURED.

July 2. Richard Burns, yard brakeman, Grosse Isle, hand caught and finger injured, coupling cars on boat.

TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Coupling cars | ..... | 1 | ..... | ..... | 1 | ..... |
| Total | ..... | 1 | ..... | ..... | 1 | ..... |

SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Mumber of persons killed during the year on the entire line, | 1 |
| Same for Michigan, | 1 |
| Number of persons injured during the year on the entire line, | 1 |
| Same for Michigan, | 1 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 2 |
| Persons killed or injured in Michigan while intoxicated, | None. |
| Trespassers and tramps killed or injured in Michigan, | None. |
| Suicides in Michigan, | None. |

PROVINCE OF ONTARIO, }
COUNTY OF ELGIN, } ss.

R. J. Pelton of the city of St. Thomas in the county of Elgin, Auditor of the Canada Southern Bridge Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

(Signed), [L. S. OF R. R.] R. J. PELTON,
*Auditor.*

Subscribed and sworn to before me, this 27th day of April, A. D. 1882.

[L. S.] JNO. FARLY,
*Notary Public.*

# ANNUAL REPORT.

OF THE

# CHICAGO AND CANADA SOUTHERN RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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[LEASED AND OPERATED BY THE LAKE SHORE & MICHIGAN SOUTHERN RAILROAD COMPANY.]

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* AUGUSTUS SCHELL, New York.
*Vice President,* EDWARD A. WICKES, New York.
*Secretary,* CHARLES F. COX, New York.
*Treasurer,* CORNELIUS VANDERBILT, New York.

| | |
|---|---|
| *General Manager,* - - | See officers of the L. S. & M. S. Railway Company. |
| *General Superintendent,* - | |
| *Assistant General Superintendent,* | |
| *Division Superintendents,* - | |
| *Chief Engineer,* - - - | |
| *Superintendent of Telegraph,* | |
| *Auditor,* - - - - | |
| *General Passenger Agent,* - | |
| *General Freight Agent,* - | |
| *Attorney,* - - - - | |
| *Receiver,* - - - - | |

## DIRECTORS.

WM. H. VANDERBILT, New York, N. Y.
CORNELIUS VANDERBILT, New York, N. Y.
AUGUSTUS SCHELL, New York, N. Y.
SIDNEY DILLON, New York, N. Y.
EDWIN D. WORCESTER, New York, N. Y.
SAMUEL F. BARGER, New York, N. Y.
EDWIN A. WICKES, New York, N. Y.
WILLIAM L. SCOTT, Erie, Penn.
JOHN NEWELL, Chicago, Ill.

Term expires June, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 87 |
| Number of stockholders in Michigan at same date, | 2 |
| Amount of full-paid stock held in Michigan at same date, | 115 shares. |

Date of annual meeting of stockholders,—first Thursday in June.
Fiscal year of company ends, December 31st.
General offices of the company are located at Grosse Isle, Mich.
Financial office,—Grand Central Depot, N. Y.
Operating Department, Cleveland, Ohio.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $53,467 53 |
| Total expense, including taxes, | $55,510 99 | |
| Net loss, | $2,043 46 | |
| Interest on funded debt, | 177,870 00 | |
| Balance for the year,—deficit, | $179,913 46 | |
| Balance (profit and loss) last year, | 1,380,403 52 | |
| Items not included in above, as follows: | | |
| Note cancelled, | | 47 51 |
| Balance forward to next year, | | 1,560,269 47 |
| | $1,560,316 98 | $1,560,316 98 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $10,000,000 00 |
| Par value of shares, | $100.00 | | |
| Average price received per share, | $100.00 | | |
| Amount issued [No. of shares, 26,674], | | | |
| Amount paid in on common, | | $2,667,400 00 | |
| Amount paid in on preferred, | | Nothing. | |
| Total amount paid in as per books of the company, | | | $2,667,400 00 |
| Amount realized in property, | | $2,667,400 00 | |
| Amount paid in per mile of road owned by company, | | | 39,458 58 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due 1902, interest 7 per cent, payable April and October), | | $2,541,000 00 |
| Total amount of funded debt, | | $2,541,000 00 |
| Amount received from the same in property, | $2,541,000 00 | |

FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for construction, | | $8,004 67 |
| Incurred for equipment, | | |
| Incurred for real estate, | | |
| Incurred in any other manner and how: | | |
| Past due coupons. | $1,511,571 25 | |
| Deficit in operating, due L. S. & M. S. R'y Co., | 8,851 13 | |
| | | 1,520,422 38 |
| Total debt liabilities, | | $4,069,427 05 |

| | |
|---|---|
| Amount of debt liabilities per mile of road [67.60 miles], | 60,198 62 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | 4,069,427 05 |
| Contingent liabilities as follows: None. | |

COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, | 5,176,557 58 |
| Average cost of same per mile, | 76,576 29 |
| Proportion of cost of road and equipment for Michigan, | 4,831,963 90 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | | |
| From through passengers, | $15,381 07 | |
| From express and baggage, | 593 49 | |
| From mails, | 3,786 96 | |
| Total earnings, passenger department, | | $19,761 52 |
| Earnings per train mile run [19,616 miles], | $1,00.7 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | | |
| From through traffic, | $33,688 37 | |
| From other sources, freight department, | 17 64 | |
| Total earnings freight department, | | $33,706 01 |
| Earnings per train mile run [49,886 miles], | $0 67.5 | |
| Total transportation earnings, | | $53,467 53 |
| Earnings per mile of road operated [67.60 miles], | $790 94 | |
| Earnings per train mile run, from all trains earning revenue [69,502 miles], | $0 76.9 | |
| Proportion of earnings for Michigan, | $49,908 31 | |
| Total income from all sources, | | $53,467 53 |
| Proportion of income for Michigan, | $49,908 31 | |

## EXPENSES.

### Class 1.—*Maintenance of Way and Buildings.*

| | | |
|---|---|---|
| Repairs of roadway and track, | | $11,158 76 |
| Renewal of rails, | | 233 79 |
| Renewal of ties, | | 5,273 12 |
| Repairs of bridges, including culverts and cattle guards, | | 6,023 29 |
| Repairs of fences, road crossings, and signs, | | 557 12 |
| Repairs of buildings, | | 613 95 |
| Total, | | $23,860 03 |

### Class 2.—*Maintenance of Motive Power and Cars.*

| | | |
|---|---|---|
| Repairs of locomotives, | | 343 60 |
| Repairs of passenger cars, | | 249 06 |
| Total, | | $592 66 |

### Class 3.—*Conducting Transportation.*

| | | |
|---|---|---|
| Fuel for locomotives, | | $5,759 39 |
| Water-supply, | | 695 18 |
| Oil and waste, | | 314 83 |
| Locomotive service, | | 4,372 48 |
| Passenger train service, | | 1,972 00 |
| Passenger train supplies, | | 140 63 |
| Freight train service, | | 1,955 28 |
| Freight train supplies, | | 38 05 |
| Telegraph expenses (maintenance and operating), | | 1,453 61 |
| Damages to property and cattle, | | 20 00 |
| Agents and station service, | | 5,192 82 |
| Station supplies, | | 515 84 |
| Total, | | $22,430 11 |

### Class 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of clerks in general offices, | | $6,191 40 |
| Stationery and printing, | | 485 36 |
| Taxes in Michigan, | $1,080 30 | |
| Taxes in other States, | 871 13 | |
| | | $1,951 43 |
| Total, | | $8,628 19 |

## RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $23,860 03 |
| Maintenance of motive power and cars, | 592 66 |
| Conducting transportation, | 22,430 11 |
| General expenses, including taxes, | 8,628 19 |
| Total operating expenses and taxes, | $55,510 99 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | | $821 17 |
| Operating expenses and taxes per train mile run, for trains earning revenue [69,502 miles], | $0 79.8 | |
| Proportion of operating expenses and taxes for Michigan, | $51,815 73 | |
| Per centage of expenses to earnings, | 103.82 | |
| Net loss per mile of road, | | $30 23 |
| Net loss per train mile, | $0 02.9 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $5,176,557 58 |
| Equipment account, | | |
| Other assets—Debit balances: | | |
| Income account, | $48,698 22 | |
| Past due interest on bonds, | 1,511,571 25 | |
| | | $1,560,269 47 |
| Total assets, | | $6,736,827 05 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $2,667,400 00 |
| Funded debt, | | 2,541,000 00 |
| Unfunded debt: | | |
| Interest unpaid, | $1,511,571 25 | |
| Notes payable, } Construction acc't, | 4,854 00 | |
| Vouchers and accounts, } Construction acc't, | 3,150 67 | |
| Other liabilities,—due L. S. & M. S. R'y Co., | 8,851 13 | |
| | | 1,528,427 05 |
| Total liabilities, | | $6,736,827 05 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Blissfield, Mich,, to Fayette, Ohio, 1872.
From Blissfield, Mich., to Detroit River Bridge, 1873.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 63 10 | |
| Length completed in Ohio, | 4 50 | |
| Total length completed, | | 67 60 |
| Total length of road belonging to this company, | | 67 60 |
| Total length of road belonging to this company in Michigan, | 63 10 | |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Aggregate lingth of sidings, spurs, and other tracks not above enumerated, | | 3 97 |
| Same in Michigan, | 3 69 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 71 57 |
| Same in Michigan, | 6 79 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, —— lbs., | | 40 93 |
| Total length of tracks laid with iron rails, weight per yard, —— lbs. | | 30 64 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 5; aggregate length, feet, | | 876 |
| Wooden trestles, 1; aggregate length, feet, | | 59 |
| Total, 6 | | 935 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 114 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 30 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
L. S. & M. S. R. R., at Trenton and Dearfield.
Toledo, Canada Southern & Detroit R. R., at Trenton.
Flint & Pere Marquette R. R., at Carlton.
Toledo & Ann Arbor R. R., at Dundee.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 92 |
| Number of crossings of highways over railroad,—farmer's crossing over railroad, | 2 |
| Number of highway bridges 18 feet above track, | 2 |
| Have safety-guards been erected at over-head obstructions? | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 16 |
| Same in Michigan, | 15 |

*Employés.*

Included with Lake Shore & Michigan Southern Railway Company.

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 141.91 |
| What is the average cost per rod? | $1 20 | |
| The total cost of same? | $54,493 44 | |
| How many miles of new fencing have you built during the year? | | 83 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road? | | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 8 |
| Average length of sections, | 7.85 |
| Number of men in each section gang, | 3 |
| Number of new ties put in whole line during the year, | 19,981 |
| Number of new ties put in track in Michigan, | 19,751 |
| Average number of new ties per mile of road, | 300 |
| New rails put in track—second hand rail: | |
| Iron [tons 6.49] miles, | 0.069 |
| Total miles of track laid with new rails, | 0.069 |
| Between what points were new rails laid: | |
| Wherever needed. | |

ROLLING STOCK.

Furnished by Lake Shore & Michigan Southern Railway Company.

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 19,616 |
| Miles run by freight trains during the year, | 49,886 |
| Total mileage of trains earning revenue, | 69,502 |
| Miles run by work trains during the year, | 5,488 |
| Miles run by switching trains, | 48 |
| Total train mileage, | 75,038 |

*Passenger Traffic.*

Included with Lake Shore & Michigan Southern Railway.

*Freight Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of tons of through freight carried, | | | |
| Number of tons of local freight carried, | 56,225 | | |
| Total tons of freight carried, | 56,225 | | |
| Total mileage of local freight, | | 1,110,955 | |
| Total freight mileage, or tons carried one mile, | | 1,110,955 | |
| Average ton haul for all freight, | | 19.76 | |
| Average amount received for each ton haul, | | | 59.90 |
| Average rate per ton per mile, received for all freight, | | | 03.03 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 6,725 | 11.96 |
| Flour, | 490 | 87 |
| Provisions (beef, pork, lard, etc.) | 919 | 1.63 |
| Animals, | 2,845 | 5.06 |
| Other agricultural products, | 1,887 | 3.36 |
| Lumber and forest products, | 21,917 | 38.98 |
| Coal, | 898 | 1.60 |
| Salt, | 110 | 20 |
| Petroleum, | 159 | 28 |
| Other iron and castings, | 177 | 31 |
| Stone, sand, and brick, | 882 | 1.57 |
| Manufactures,—articles shipped from point of production, | 2,166 | 3.85 |
| *Merchandise and other articles not enumerated above, | 17,050 | 30.33 |
| Total tons carried, | 56,225 | 100. |

STATE OF NEW YORK, }
COUNTY OF NEW YORK, } ss.

Charles F. Cox, Secretary of the Chicago and Canada Southern Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed,) C. F. COX.

Subscribed and sworn to before me, this 21st day of April, A. D. 1882.

(L. S.) D. W. C. PARDEE,
*Notary Public.*

* Includes 12,255 tons charcoal.

# ANNUAL REPORT

OF THE

# CHICAGO AND GRAND TRUNK RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JOSEPH HICKSON, Montreal, Canada.
*Vice President*, L. J. SEARGEANT, Montreal, Canada.
*Secretary*, *Treasurer*, } CHARLES PERCY, Port Huron, Mich.
*General Manager*, S. R. CALLAWAY, Chicago, Ills.
*Superintendent*, W. H. PETTIBONE, Battle Creek, Mich.
*Chief Engineer*, J. C. JAMES, Battle Creek, Mich.
*General Passenger Agent*, *General Freight Agent*, } GEO. B. REEVE, Chicago, Ills.
*Attorney*, E. W. MEDDAUGH, Detroit, Mich.

## DIRECTORS.

JOSEPH HICKSON, Montreal, Canada.
L. J. SEARGEANT, Montreal, Canada.
JAS. MCMILLAN, Detroit, Mich.
E. W. MEDDAUGH, Detroit, Mich.
W. S. SHEPARD, Bath, Steuben Co., N. Y.
W. C. BEARDSLEY, Auburn, N. Y.
D. J. NORTON, Albany, N. Y.
F. A. HOWE, Chicago, Ills.
J. H. WHITMAN, Chicago, Ills.
JOHN MCCAFFERY, Chicago, Ills.
A. H. DALTON, Chicago, Ills.
W. MUNRO, Chicago, Ills.
DR. F. SKINNER, Valparaiso, Ind.
T. S. STANFIELD, South Bend, Ind.
C. F. HARRINGTON, Port Huron, Mich.

## STOCKHOLDERS, STOCKS, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 339 |
| Number of stockholders in Michigan at same date, | 24 |
| Amount of full-paid stock held in Michigan at same date, | $115,000 |

Date of annual meeting of stockholders,—second Wednesday in March.
Fiscal year of company ends, December 31st.
General offices of the company are located at Chicago, Ills., and Port Huron, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $1,631,750 71 |
| Total expense, including taxes, | $1,398,264 80 | |
| Net income, | | $233,485 91 |
| Interest on funded debt, | $184,370 74 | |
| Interest on unfunded debt, | 14,084 10 | |
| Rentals, | 33,759 69 | $232,214 53 |
| Balance applicable to dividends, | | $1,271 38 |
| Balance for the year, | | 1,271 38 |
| Balance (profit and loss) last year, | | 104 81 |
| Balance forward to next year, | $1,376 19 | |
| | $1,376 19 | $1,376 19 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $6,600,000 00 |
| Par value of shares, | $100.00 | | |
| Average price received per share, | $100.00 | | |
| Amount issued, $660,000, No. of shares, 66,000 | | | |
| Amount paid in on common, | | $660,000 00 | |
| Total amount paid in as per books of the Company, | | | $6,600,000 00 |
| Amount realized in property, | | $6,600,000 00 | |
| Amount paid in per mile of road owned by company, | | | 20,000 00 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1st January, 1900, interest six per cent, payable half yearly), | $6,000,000 00 |

| | | |
|---|---|---|
| [1] Income Mortgage Bonds (due 1st July 1930, interest 7 per cent, payable annually, | | $2,364,332 00 |
| Total amount of funded debt, | | $8,364,332 00 |
| Amount received from the same in cash, | $4,501,440 00 | |
| Amount received from the same in property, | 3,862,892 00 | |

FLOATING DEBT.

| | | |
|---|---|---|
| Sundry debts,—current credit balances, etc., | $554,086 58 | $554,086 58 |
| Total debt liabilities, | | $8,918,418 58 |
| Amount of debt liabilities per mile of road [330.50 miles], | $26,984 62 | |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | $8,575,026 22 |

COST OF ROAD AND EQUIPMENT.

Purchased at foreclosure sale, and no data at hand from which to furnish details of cost.

| | |
|---|---|
| Total cost of road and equipment, | $15,186,402 41 |
| Average cost of same per mile, | 46,019 40 |
| Proportion of cost of road and equipment for Michigan, | 10,308,345 00 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension or alteration of road, | $878,889 29 |
| Land, | 37,877 59 |
| Passenger and freight stations, wood-sheds, and water stations, | 24,093 19 |
| Engine-houses, car-sheds, and turn-tables, | 3,507 58 |
| New locomotives, | 82,920 54 |
| New passenger cars, / New mail and baggage cars, / New freight cars, | 62,698 04 |
| Machine-shops, machinery and tools, | 4,646 00 |
| New fences, | 40,520 00 |
| Any other expenditures charged to property account (specifying same): | |
| Air-brake equipment, | 1,254 73 |
| Interest on capital during construction, | 48,064 00 |
| Legal, etc., services, paid on income bonds, | 20,316 49 |
| C. & N. E. bonds retired, etc., | 45,273 84 |
| New furniture for stations, etc., | 8,000 00 |
| Receiver's debt, | 38,403 59 |
| Total charges to property account during the year, | $1,296,464 88 |

[1] Payable only from net income remaining after paying all expenses and interest on First Mortgage Bonds.

| | | |
|---|---|---|
| Property sold and credited property account during year (specifying same): | | |
| Value old rails released, | $184,097 42 | |
| Premium on sale of £168,000 First Mortgage bonds (less sundry expenses connected with issue), | 68,832 08 | |
| | | $252,929 50 |
| Net addition to property account for the year, | | $1,043,535 38 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $147,518 74 | |
| From through passengers, | 262,594 85 | |
| From express and baggage, | 10,407 27 | |
| From mails, | 27,622 45 | |
| From other sources, passenger department, | 1,350 34 | |
| Total earnings, passenger department, | | $449,493 65 |
| Earnings per train mile run [423,307 miles], | $1.05.2 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $251,313 20 | |
| From through traffic, | 930,788 86 | |
| Total earnings, freight department, | | $1,182,102 06 |
| Earnings per train mile run [1,015,723 miles], | $1.16.2 | |
| Total transportation earnings, | | $1,631,595 71 |
| Earnings per mile of road operated [339 miles], | $4,812 96 | |
| Earnings per train mile run, from all trains earning revenue [1,439,030 miles], | $1.13.3 | |
| Proportion of earnings for Michigan, | $1,078,103 04 | |
| Rents for use of road, stations, etc., | | 155 00 |
| Total income from all sources, | | $1,631,750 71 |
| Proportion of income for Michigan, | $1,078,206 08 | |

### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $111,614 39 |
| Renewal of rails, } Renewal of ties, } | 51,707 05 |

| | | |
|---|---|---|
| Repairs of bridges, including culverts and cattle guards, | | $9,639 54 |
| Repairs of fences, road-crossings, and signs, | | 4,128 03 |
| Repairs of buildings, | | 28,170 66 |
| Total, | | $205,259 67 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | | |
|---|---|---|
| Repairs of locomotives, | | $76,830 32 |
| Repairs of passenger cars, | | 31,923 05 |
| Repairs of freight cars, | | 67,685 41 |
| Total, | | $176,438 78 |

CLASS 3.—*Conducting Transportation.*

| | | |
|---|---|---|
| Fuel for locomotives, | | $224,248 40 |
| Water-supply, | | 11,656 79 |
| Oil and waste, | | 27,736 91 |
| Locomotive service, | | 129,590 14 |
| Passenger train service, | | 27,764 80 |
| Passenger train supplies, | | 5,852 34 |
| Freight train service, | | 130,100 90 |
| Freight train supplies, | | 9,909 77 |
| Mileage of freight cars (debit balance), | | 138,533 34 |
| Telegraph expenses (maintenance and operating), | | 29,589 08 |
| Damage and loss of freight and baggage, | | 3,785 36 |
| Damages to property and cattle, | | 3,231 02 |
| Personal injuries, | | 7,846 07 |
| Agents and station service, | | 119,001 82 |
| Station supplies, | | 8,077 30 |
| Total, | | $876,924 04 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $21,000 00 |
| Salaries of clerks in general offices, | | 24,197 26 |
| Law expenses, | | 13,414 74 |
| Insurance, | | 3,189 58 |
| Stationery and printing, | | 18,788 87 |
| Outside agencies and advertising, | | 18,641 55 |
| Contingencies, | | 9,335 22 |
| Taxes in Michigan, | $19,220 48 | |
| Taxes in other States, | 11,854 61 | |
| | | 31,075 09 |
| Total, | | $139,642 31 |

## RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $205,259 67 |
| Maintenance of motive power and cars, | 176,438 78 |
| Conducting transportation, | 876,924 04 |
| General expenses, including taxes, | 139,642 31 |
| Total operating expenses and taxes, | $1,398,264 80 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $4,124 67 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [1,439,030 miles), | | $0.97.86 |
| Proportion of operating expenses and taxes for Michigan, | $923,926 08 | |
| Per centage of expenses to earnings, | 85.08 | |
| Net earnings per mile of road, | $688 29 | |
| Net earnings per train mile, | $0.15.5 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $15,186,402 41 |
| Equipment account, | | |
| Cash items: | | |
| Cash, | $9,933 79 | |
| Due from agents and companies, | 76,008 58 | |
| | | 85,942 37 |
| Other assets: | | |
| Materials and supplies, | $218,297 69 | |
| Debit balances, | 29,152 30 | |
| | | 247,449 99 |
| First mortgage bonds in reserve, | | 164,168 00 |
| Total assets, | | $15,683,962 77 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $6,600,000 00 |
| Funded debt, | | 8,528,500 00 |
| Unfunded debt: | | |
| Interest unpaid, | 19,880 00 | |
| Notes payable, | 10,315 85 | |
| Vouchers and accounts, | 519,067 72 | |
| Other liabilities, | 4,823 01 | |
| | | 554,086 58 |
| Profit and loss, or income accounts, | | 1,376 19 |
| Total liabilities, | | $15,683,962 77 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Port Huron to Emmet, November, 1869.
From Emmet to Attica, December, 1870.
From Attica to Flint, December, 1871.
From Flint to Lansing, January 1st, 1877.
From Lansing to Battle Creek, December, 1869.
From Battle Creek to South Bend, autumn of 1872.
From South Bend to Valparaiso, October 13th, 1873.
From Valparaiso to Chicago, February 1st, 1880.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 224 00 | |
| Length completed in Indiana, | 80 61 | |
| Length completed in Illinois, | 25 89 | |
| Total length completed, | | 330 50 |
| Total length of road belonging to this company, | | 330 50 |
| Total length of road belonging to this company in Michigan, | 224 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 43 85 |
| Same in Michigan, | 27 72 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 374 35 |
| Same in Michigan, | 251 72 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 60 and 65 lbs., | | 232 50 |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs. | | 98 00 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Name, description, and length of each: | | |
| Chicago & Western Indiana R. R., 49th St. to 12th St., Chicago, | 4 50 | |
| Grand Trunk Junction Railway, | 4 00 | |
| Total length of above roads, | | 8 50 |
| Total length in other States, specifying each: | | |
| Illinois, | 8 50 | |
| Total miles of road operated by this company, | | 339 00 |
| Total miles of road operated by this company in Michigan, | 224 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 85; aggregate length, feet, | | 7,790 |
| Wooden trestles, | 41; aggregate length, feet, | 4,156 |
| Total, | 126 | 11,946 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 234 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 520 |
| Number of cattle guards renewed during the year, | 135 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Grand Trunk R. R., near Port Huron.
Detroit & Bay City R. R., at Lapeer.
Flint & Pere Marquette R. R., at Flint.
Detroit, Grand Haven & Milwaukee R. R., at Durand.
Detroit, Lansing & Northern R. R., near Lansing.
Jackson, Lansing & Saginaw R. R., at Lansing.
Lake Shore & Michigan Southern R. R., at Lansing and Schoolcraft.
Michigan Central R. R., at Charlotte, Battle Creek, & Cassopolis.
Grand Rapids & Indiana R. R. at Vicksburg.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 263 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 3 |
| Number of crossings of highways at grade in this State without signs, | 3 |
| Number of crossings of highways over railroad, | 5 |
| Number of crossings of highways under railroad, | 4 |
| Number highway bridges 18 feet above track, | 3 |
| Number highway bridges less than 18 feet above track, | 2 |
| Have safety-guards been erected at over-head obstructions? | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 73 |
| Same in Michigan, | 43 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 1,838 |
| Same in Michigan, | 1,121 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 372 |
| What is the average cost per rod? | $0.75 | |
| The total cost of same? | $89,282 00 | |
| How many miles of new fencing have you built during the year? [In Michigan], | | 40 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | |
| In St. Clair, Lapeer, and Genesee counties, | | 23 |
| In Ingham, Eaton, and Calhoun counties, | | 32 |
| In Kalamazoo, St. Joseph, and Cass counties, | | 29 |
| Total miles, | | 84 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 45 |
| Average length of sections (miles), | 5 |
| Average number of men in each section gang, | 5 |
| Number of new ties put in whole line during the year, | 155,704 |
| Number of new ties put in track in Michigan, | 100,000 |
| Average number of new ties per mile of road, | 471 |
| New rails put in track: | |
| Steel [tons 7,335], miles, | 73.5 |
| Total miles of track laid with new rails, | 73.5 |
| Between what points were new rails laid: | |
| Port Huron and Lansing, | 19.50 |
| Lansing and Battle Creek, | 19.25 |
| Battle Creek, Mich., and Kingsbury, Ind., | 26. |
| Kingsbury, Ind., and Elsdon, Illinois, | 8.75 |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 482,200 |
| Amount of trestle work replaced with earth during the year (linear feet), | 705 |
| Timber culverts replaced with timber,—[number, 54], timber used (feet B. M.), | 97,000 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 10 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 28 |
| Number of passenger cars—8-wheel, | 18 |
| Number of express and baggage cars, | 9 |
| Number of box freight cars, | 9 |

| | |
|---|---|
| Average rate of fare per mile, for local passengers, | 0.02.3 |
| Number of stock cars, | 15 |
| Number of platform cars, | 115 |
| Number of conductors' way cars, | 43 |
| Other cars as follows: | |
| Auxiliary and snow plows, | 6 |
| Number of locomotives equipped with train-brake, | 14 |
| Number of cars used in passenger trains equipped with train-brake, | All. |
| What kind of train-brake is in use on your road? | Westinghouse. |
| Number of passenger train cars with Miller platform and buffer, | All. |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 423,307 |
| Miles run by freight trains during the year, | 1,015,723 |
| Total mileage of trains earning revenue, | 1,439,030 |
| Miles run by work trains during the year, | 210,698 |
| Miles run by switching trains, | 528,927 |
| Total train mileage, | 2,178,655 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 50 |
| Average weight of passenger trains, exclusive of passengers,—pounds, | 300,000 |
| Average number of cars in freight trains, | 24.7 |
| Average weight of freight trains, exclusive of freight,—pounds, | 520,000 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 104,379 | | |
| Number of local passengers carried, | 215,043 | | |
| Total number of passengers carried, | 319,422 | | |
| Total passenger mileage, or passengers carried one mile, | | 28,600,744 | |
| Average distance traveled by each passenger, | | 90 | |
| Average amount received from each passenger, | | | $1.28 |
| Highest rate of fare per mile, for any distance, | | | 0.03 |
| Lowest rate of fare per mile, for any distance, | | | 0.00.4 |
| Average rate of fare per mile, for through passengers, | | | 0.01.2 |

| | |
|---|---|
| Average rate of fare per mile, for all passengers, | 0.01.4 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | 705,964 | | |
| Number of tons of local freight carried, | 172,361 | | |
| Total tons of freight carried, | 878,325 | | |
| Total mileage of through freight, | | 210,516,277 | |
| Total mileage of local freight, | | 18,117,792 | |
| Total freight mileage, or tons carried one mile, | | 228,634,069 | |
| Average ton haul for through freight, | | 298 | |
| Average ton haul for local freight, | | 105 | |
| Average ton haul for all freight, | | 260 | |
| Average amount received for each ton haul, | | | $1.34.6 |
| Average rate per ton per mile, received for through freight, | | | 00.44 |
| Average rate per ton per mile, received for local freight, | | | 01.39 |
| Average rate per ton per mile, received for all freight, | | | 00.52 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 248,033 | 28.2 |
| Flour, | 49,873 | 5.7 |
| Provisions (beef, pork, lard, etc.), | 24,614 | 2.8 |
| Animals, | 32,531 | 3.7 |
| Other agricultural products, | 69,749 | 7.9 |
| Lumber and forest products, | 89,136 | 10.1 |
| Coal, | 80,923 | 9.2 |
| Plaster, | 5,953 | .7 |
| Salt, | 45,797 | 5.2 |
| Petroleum, | 3,371 | .4 |
| Railroad iron,—iron and steel rails, | 15,429 | 1.8 |
| Pig and bloom iron, | 5,707 | .7 |
| Other iron and castings, | 14,016 | 1.6 |
| Ores, | 1,332 | .2 |
| Stone and brick, | 7,111 | .8 |
| Manufactures,—articles shipped from point of production, | 83,820 | 9.5 |
| Merchandise and other articles not enumerated above, | 100,930 | 11.5 |
| Total tons carried, | 878,325 | 100. |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. One and a half first-class rates except for fish, game, and fruit, which are charged first-class, and half-fare for messenger freight taken at trains.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Great Eastern and Commercial Express lines, operated by railway companies who own or lease the rolling stock and jointly share the results. No preferences given.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Michigan Car Company, Detroit, | $9,171 57 |
| United States Rolling Stock Company, New York, | 45,245 55 |
| Commercial Express Line, Chicago, Ill., | 22,915 96 |
| National Car Company, St. Albans, Vt., | 13,644 84 |
| Great Eastern Line, Chicago, Ill., | 17,235 83 |
| Merchants' Despatch Transportation Company, New York, | 51 97 |
| Great Western Despatch, Indianapolis, Ind., | 29 72 |
| Empire Line, Philadelphia, Pa., | 7 79 |
| Total, | $91,067 40 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Sleeping and drawing-room cars owned by the Pullman Palace Car Co., who make the usual charges.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$24,771.87 per annum.

*Telegraph.*

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Western Union Telegraph Company, two wires, 330½ miles each.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

June 11. Jacob Staley, pauper, Goodell's Water Tank, trespasser, old and deaf.

March 31. —— Burke, brakeman, Port Huron, fell from train; lack of caution.

April 9. J. Weise, boy of sixteen years, Imlay City, collision, trespasser; company exonerated.

July 23. —— Keener, child of two years, one mile east of G. T. Junction, trespasser; purely accidental.

August 28. E. Grover, brakeman, three miles east of Schoolcraft, derailment; purely accidental.

October 9. Lewis Campbell, night car-checker, Battle Creek, checking cars; company exonerated.

December 30. Thos. Costelle, two and a half miles east of Elba, trespasser, intoxicated.

### INJURED.

July 4. —— DeGraff, brakeman, Chamberlain's, derailment; purely accidental.

January 6. Miss Anna Waller, Miss Barber, C. W. Maroney, D. C. Dyle, passengers, Ransom, derailment; purely accidental.

January 10. J. Atkins, brakeman, Morrice, coupling; lack of caution.

January 14. E. D. McGowan, switchman, G. T. Junction, coupling; purely accidental.

January 19. J. Pangborn, switchman, Battle Creek, coupling; carelessness.

January 20. Wm. Hyke, brakeman, G. T. Junction, coupling; lack of caution.

January 25. A. Jones, switchman, Battle Creek, coupling; purely accidental.

February 8. Jno. Pignegno, brakeman, Flint, getting off train; lack of caution.

February 21. David Bain, brakeman, Schoolcraft, coupling; lack of caution.

January 30. R. H. Barnes, brakeman, Edwardsburg, overhead obstruction; purely accidental.

March 2. Jno. Closterman, sectionman, Duffield, removing wreck; purely accidental.

March 8. H. Cunnan, brakeman, Battle Creek, collision; purely accidental.

March 24. J. Newcombe, brakeman, Ft. Gratiot, coupling; purely accidental.

April 12. A. G. Paine, telegraph operator, Marcellus, getting on train; lack of caution.

April 14. A. Owens, laborer, Port Huron, coupling; purely accidental.

April 22. C. Jackson, brakeman, Lansing, coupling; purely accidental.

May 2. J. Malenzo, switchman, Imlay City, switching; lack of caution.

May 11. E. Dolan, night call-boy, Battle Creek, getting off train; lack of caution.

June 8. C. E. Miles, brakeman, Marcellus, coupling; lack of caution.

June 9. J. Netterville, brakeman, Durand, coupling; lack of caution.

June 9. G. Herrick, passenger, Shaftsburg, getting on train; lack of caution.

June 10. C. B. Nimmo, station agent, G. T. Junction, getting on train; purely accidental.

June 21. J. J. Franklin, brakeman, Elba, coupling; purely accidental.

June 22. F. H. Sweet, laborer, five miles west of Charlotte, asleep on the track; carelessness.

June 25. —— King, a child, two miles west of Millett's, highway crossing.

June 28. W. O. Connor, laborer, two miles west of Benton, collision; purely accidental.

July 18. D. Munsell, fireman, west of Scott's, shaking gate of engine; purely accidental.

August 11. H. Vincent, brakeman, one-half mile east of Imlay City, fell from train; lack of caution.

May 16. J. Smith, Jr., brakeman, Ft. Gratiot, coupling; lack of caution.

May 22. J. Dolan, night call-boy, Battle Creek; getting off train; lack of caution.

August 22. —— Thomas, conductor, Marcellus, coupling; purely accidental.

August 22. A. H. Munson, Charlotte, highway crossing; purely accidental.

August 25. —— Ganner, brakeman, Vicksburg, coupling; lack of caution.

August 26. P. Marrion, W. Le Barron, Mrs. Henderhill, passengers, five and a half miles east of Battle Creek, derailment; purely accidental.

August 29. G. W. Clark, brakeman, two and a half miles west of Battle Creek, derailment; purely accidental.

September 10. A. P. Miller, brakeman, Sedley, coupling; lack of caution.

September 11. E. Murphy, brakeman, Battle Creek, blocking car; lack of caution.

September 4. A. Drolet, switchman, Battle Creek, coupling; lack of caution.

September 7. J. Whitney, brakeman, Emmet, coupling; lack of caution.

October 10. Mrs. Mitchell, passenger, Chicago Junction, getting off the train; company not to blame.

October 13. —— Bellyea, switchman, Port Huron, caught foot in frog; purely accidental.

October 17. —— McArron, brakeman, Edwardsburg, coupling; lack of caution.

October 21. F. Headen, C. Brewster, passengers, Indian Lake, derailment; purely accidental.

November 29. —— Greene, brakeman, Battle Creek, slipped between engine and car; purely accidental.

## TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | 2 | |
| Coupling cars | | | | | 19 | |
| Derailments | | 1 | | 9 | 2 | |
| Falling from trains | | 1 | | | 2 | |
| Frogs | | | | | 1 | |
| Getting on and off trains | | | | 2 | 4 | |
| Highway crossings | | | | | | 2 |
| Miscellaneous | | 1 | | | 6 | |
| Overhead obstructions | | | | | 1 | |
| Stealing rides | | | | | | |
| Trespassers | | | 4 | | | |
| Total | | 3 | 4 | 11 | 37 | 2 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 12 |
| Same in Michigan, | 7 |
| Number of persons injured during the year on the entire line, | 102 |
| Same in Michigan, | 50 |
| Number of casualties purely accidental in Michigan, | 29 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 21 |
| Persons killed or injured in Michigan while intoxicated, | 1 |
| Trespassers and tramps killed or injured in Michigan, | 3 |

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

Samuel R. Callaway, General Manager, of the Chicago & Grand Trunk Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, S. R. CALLAWAY,
*General Manager.*

Subscribed and sworn to before me, this 27th day of April, A. D. 1882.

[L. S.] LOUIS C. STANLEY,
*Notary Public, Wayne County, Mich.*

STATE OF MICHIGAN, }
COUNTY OF ST. CLAIR, } ss.

Charles Percy, Secretary and Treasurer of the Chicago and Grand Trunk Railway Company, being duly sworn, deposes and says he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, CHARLES PERCY,
*Secretary and Treasurer.*

Subscribed and sworn to before me, this 29th day of April, A. D. 1882.
[L. S.] CHAS. D. THOMPSON,
*Notary Public, St. Clair County, Mich.*

# ANNUAL REPORT

OF THE

# CHICAGO, DETROIT & CANADA GRAND TRUNK JUNCTION RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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[LEASED AND OPERATED BY THE GRAND TRUNK RAILWAY OF CANADA.]

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JOSEPH HICKSON, Montreal, Canada.
*Vice President,* L. J. SEARGEANT, " "
*Secretary and Treasurer,* R. WRIGHT, " "
*General Superintendent,* W. I. SPICER, " "
*Assistant General Superintendent,* R. LARMOUR, Stratford, Ontario.
*Attorney.* E. W. MEDDAUGH, Detroit.

## DIRECTORS.

JOSEPH HICKSON, Montreal.
L. J. SEARGEANT, Montreal.
JOHN BELL, Belleville.
E. W. MEDDAUGH, Detroit.
R. WRIGHT, Montreal.

Term expires September, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 26 |
| Number of stockholders in Michigan at same date, - - | 1 |
| Amount of full-paid stock held in Michigan at same date, - | $100 00 |

Date of annual meeting of stockholders,—Last Wednesday of September.
Fiscal year of company ends December 31st.
General offices of the company are located at Detroit, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $396,279 21 |
| Total expense, including taxes, | $426,749 48 | |
| Net deficit, | $30,470 27 | |
| Interest on funded debt, 6 per cent, | $65,700 00 | |
| Interest guaranteed on stock, 4 per cent, | 43,800 00 | |
| Balance for the year,—deficit, | $139,970 27 | |
| Balance (deficit) last year, | 2,165,324 25 | |
| Balance forward to next year, | | $2,305,294 52 |
| | $2,305,294 52 | $2,305,294 52 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $1,095,000 00 |
| Par value of shares, | $100 00 | |
| Average price received per share, | $89 31 | |
| Amount issued, $1,095,000.00, [number of shares 10,950.] | | |
| Amount paid in on common, | $1,095,000 00 | |
| Total amount paid in as per books of the company, | | 1,095,000 00 |
| Amount realized in cash, | $978,984 67 | |
| Amount paid in per mile of road owned by company, | | 18,443 65 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1st July, 1884 (held in England), interest 7 per cent, payable quarterly) | $1,095,000 00 |
| Total amount of funded debt, | $1,095,000 00 |
| Total debt liabilities, | $1,095,000 00 |
| Amount of debt liabilities per mile of road [59.37 miles], | 18,443 66 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | $1,095,000 00 |

Contingent liabilities as follows: None.

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, | $2,073,984 67 |
| Average cost of same per mile, | 34,933 20 |
| Proportion of cost of road and equipment for Michigan, | 2,073,984 67 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $77,910 18 | |
| From through passengers, | 97,042 59 | |
| From express and baggage, | 8,508 91 | |
| From mails, | 7,533 22 | |
| Total earnings, passenger department, | | $190,994 90 |
| Earnings per train mile run [162,534 miles], | $1.17.5 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $27,622 43 | |
| From through traffic, | 177,591 30 | |
| Total earnings, freight department, | | $205,213 73 |
| Earnings per train mile run [271,650 miles], | $0 75.54 | |
| Total transportation earnings, | | $396,208 63 |
| Earnings per mile of road operated [59.37 miles], | $6,673 55 | |
| Earnings per train mile run, from all trains earning revenue [434,184 miles], | $0 91.25 | |
| Proportion of earnings for Michigan, | | 396,208 63 |
| Rents for use of road, stations, etc., | | 70 58 |
| Income from all other sources, | None. | |
| Total income from all sources, | | $396,279 21 |
| Proportion of income for Michigan, | $396,279 21 | |

### EXPENSES.

#### CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $34,137 49 |
| Renewal of rails, | 16,152 63 |
| Renewal of ties, | 10,953 82 |
| Repairs of bridges, including culverts and cattle guards, | 4,255 78 |
| Repairs of fences, road-crossings, and signs, | 3,004 69 |
| Repairs of buildings, | 22,309 02 |
| Total, | $90,813 43 |

#### CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $28,496 61 |
| Repairs of passenger cars, | 13,114 97 |
| Repairs of freight cars, | 32,138 79 |
| Total, | $73,750 37 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $55,301 18 |
| Water-supply, | 3,250 15 |
| Oil and waste, | 3,968 19 |
| Locomotive service, | 46,680 33 |
| Passenger train service, | 6,476 73 |
| Passenger train supplies, | 2,480 28 |
| Freight train service, | 13,000 97 |
| Freight train supplies, | 4,960 59 |
| Mileage of freight cars (debit balance), | 8,067 41 |
| Telegraph expenses (maintenance and operating) | 9,360 00 |
| Damage and loss of freight and baggage, | 2,380 95 |
| Damages to property and cattle, | 588 00 |
| Personal injuries, | 99 17 |
| Agents and station service, | 62,047 61 |
| Station supplies, | 14,491 34 |
| Total, | $233,152 90 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $2,720 89 |
| Salaries of clerks in general offices, | 2,210 88 |
| Law expenses, | 2,293 26 |
| Insurance, | 2,233 46 |
| Stationery and printing, | 412 34 |
| Outside agencies and advertising, | 5,889 40 |
| Contingencies, | 2,913 64 |
| Taxes in Michigan, | 10,358 91 |
| Total, | $29,032 78 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $90,813 43 |
| Maintenance of motive power and cars, | 73,750 37 |
| Conducting transportation, | 233,152 90 |
| General expenses, including taxes, | 29,032 78 |
| Total operating expenses and taxes, | $426,749 48 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $7,187 96 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [434,184 miles], | | $0 98.29 |
| Proportion of operating expenses and taxes for Michigan, | $426,749 48 | |
| Per centage of expenses to earnings, | 117.47 | |
| Net loss per mile of road, | $514 41 | |
| Net loss per train mile, | | $0.07.04 |

## DESCRIPTION OF ROAD.

State when the road or portions thereof were opened for public use:
From Port Huron to Detroit Junction, 1859.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 59 37 | |
| Total length completed, | | 59 37 |
| Total length of road belonging to this company, | | 59 37 |
| Total length of road belonging to this company in Michigan, | 59 37 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 16 71 |
| Same in Michigan, | 16 71 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 76 08 |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 60 and 65 lbs., | 60 13 | |
| Total length of track laid with iron rails, weight per yard, 60 lbs., | 15 95 | |
| Total miles of road operated by this company, | | 59 37 |
| Total miles of road operated by this company in Michigan, | | 59 37 |

### *Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Iron bridges, number of, | 6; aggregate length, feet, | 924 |
| Total, | 6 | 924 |

### *Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 42 |
| Stone, number, | 34 |

### *Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 176 |
| Number of cattle guards renewed during the year, | 30 |

### *Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Detroit & Milwaukee R. R., at Detroit.
Detroit & Bay City R. R., at Detroit.
Chicago & Grand Trunk R. R., near Port Huron.
Port Huron & Northwestern R. R., near Port Huron.

What railroads cross your road either over or under your grade in this State, and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 88 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 2 |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | None. |
| Number of crossings of highways under railroad, | None. |
| Number of highway bridges 18 feet above track, | None. |
| Number of highway bridges less than 18 feet above track, | None. |

Have safety-guards been erected at over-head obstructions? There are no over-head obstructions.

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 12 |
| Same in Michigan, | 12 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 619 |
| Same in Michigan, | 619 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 118.74 |
| What is the average cost per rod? | $1 to $1 75 |
| The total cost of same? | $59,644 69 |
| How many miles of new fencing have you built during the year? | 12.57 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 13 |
| Average length of sections, | 4.49 miles. |
| Average number of men in each section gang, | 5 |
| Number of new ties put in whole line during the year, | 23,306 |
| Number of new ties put in track in Michigan, | 23,306 |
| Average number of new ties per mile of road, | 392 |
| New rails put in track: | |
| Steel [tons 309.50] miles, | 3.03 |
| Total miles of track laid with new rails, | 3.03 |

Between what points were new rails laid: At different places. A few rails here and there over the entire line.

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 60,334 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 21 |
| Number of passenger cars—8-wheel, | 17 |
| Number express and baggage cars, | 4 |
| Number of locomotives equipped with train-brake, | 8 |
| Number of cars used in passenger trains equipped with train-brake, | 21 |
| What kind of train-brake is in use on your road? | Vacuum. |
| Number of passenger train cars with Miller platform and buffer, | 21 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 162,534 |
| Miles run by freight trains during the year, | 271,650 |
| Total mileage of trains earning revenue, | 434,184 |
| Miles run by work trains during the year, | 21,968 |
| Miles run by switching trains, | 313,374 |
| Total train mileage, | 4,769,526 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 5 |
| Average weight of passenger trains, exclusive of passengers, | 160 tons. |
| Average number of cars in freight trains, | 21.8 |
| Average weight of freight trains, exclusive of freight, | 260 tons. |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 98,064 | | |
| Number of local passengers carried, | 103,159 | | |
| Total number of passengers carried, | 201,223 | | |
| Total passenger mileage, or passengers carried one mile, | 8,913,292 | | |

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Average distance traveled by each passenger, | | 44.30 | |
| Average amount received from each passenger, | | | $0.86.94 |
| Highest rate of fare per mile, for any distance, | | | 0.03.00 |
| Lowest rate of fare per mile, for any distance, | | | 0.01.52 |
| Average rate of fare per mile, for through passengers, | | | 0.01.60 |
| Average rate of fare per mile, for local passengers, | | | 0.02.74 |
| Average rate of fare per mile, for all passengers, | | | 0.01.96 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | 654,071 | | |
| Number of tons of local freight carried, | 74,011 | | |
| Total tons of freight carried, | 728,082 | | |
| Total mileage of through freight, | | 39,054,582 | |
| Total mileage of local freight, | | 2,258,228 | |
| Total freight mileage, or tons carried one mile, | | 41,312,810 | |
| Average ton haul for through freight, | | 59.71 | |
| Average ton haul for local freight, | | 30.51 | |
| Average ton haul for all freight, | | 56.74 | |
| Average amount received for each ton haul, | | | $0.28.18 |
| Average rate per ton per mile, received for through freight, | | | 0.00.45 |
| Average rate per ton per mile, received for local freight, | | | 0.01.22 |
| Average rate per ton per mile, received for all freight, | | | 0.00.50 |

*Tonnage of Articles Transported.*

| | Tons. | Per Cent. |
|---|---|---|
| Grain, | 251,773 | 34.57 |
| Flour, | 58,698 | 8.06 |
| Provisions (beef, pork, lard, etc.), | 59,491 | 8.17 |
| Animals, | 72,965 | 10.02 |
| Other agricultural products, | 17,505 | 2.41 |
| Lumber and forest products, | 41,252 | 5.67 |
| Coal, | 33,922 | 4.66 |
| Plaster, | 323 | .04 |
| Salt, | 19,692 | 2.71 |
| Petroleum, | 415 | .06 |
| Railroad iron,—iron and steel rails, | 419 | .05 |
| Pig and bloom iron, | 10,740 | 1.48 |
| Other iron and castings, | 11,769 | 1.62 |
| Ores, | 380 | .05 |
| Stone and brick, | 8,898 | 1.22 |
| Manufactures,—articles shipped from point of production, | 41,478 | 5.70 |
| Merchandise and other articles not enumerated above, | 98,362 | 13.51 |
| Total tons carried, | 728,082 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The Canadian Express. Fifty per cent of their gross receipts. Freight received at depot.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

The Great Eastern, Commercial Express, and National Despatch.

Their cars are furnished by the railway companies over whose roads they run.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads,* for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

The North American Car Company, Detroit, Mich., - - $2,649 99

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Pullman palace cars run by the Grand Trunk Railway Company (Lessees.)

Port Huron to Detroit, 35 cents single fare.

Smith's Creek to Detroit, 30 cents single fare.

Mount Clemens to Detroit, 25 cents single fare.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing. The car company collect certain agreed fares.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Until June 30th, 1883, the rate will be $8,206.11 per annum.

### *Telegraph.*

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Montreal Telegraph Company, 59.37.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

### KILLED.

March 14. H. Robb, switchman, Fort Gratiot, foot caught in frog.

May 16. G. Frank, tramp, Detroit Junction, getting out of way of Michigan Central train stepped in front of No. 9; accidental death.

July 7. J. McPhee, switchman, Fort Gratiot yard, struck while crossing track.

July 29. W. G. Miller, fence contractor, Detroit Junction, walking on track; accidental death.

November 15. T. McDonough, car oiler, M. C. R'y, Detroit Junction, foot caught in frog; accidental death.

### INJURED.

January 13. H. Lawrence, switchman, Fort Gratiot, coupling.

January 22. F. Wessel, conductor, Detroit (Milwaukee yard), struck by overhead bridge.

January 23. J. McElwain, brakeman, Milwaukee Junction, coupling.

February 13. H. Robb, switchman, Fort Gratiot, coupling.

February 14. W. McNicol, switchman, Fort Gratiot, uncoupling.

February 21. W. Mortimer, train baggageman, Mount Clemens, handling baggage.

February 21. V. Farwell, brakeman, Chicago and Grand Trunk Junction, coupling.

March 5. M. Hutchins, brakeman, Milwaukee Junction, coupling

March 29. D. McNicol, laborer, Fort Gratiot, slipped.

April 14. J. Fenton, brakeman, Fraser, car door fell off.

May 19. J. Hughes, passenger, Milwaukee Junction, stone thrown through window.

May 25. H. McIntosh, brakeman, Ridgeway, coupling.

June 10. C. B. Nimmo, agent, Chicago & Grand Trunk Junction, attempted to get on train.

June 2. G. Hunt, brakeman, Detroit & Milwaukee Junction, climbing steps.

September 8. J. Breslin, brakeman, Ridgeway, coupling cars.

September 27. R. Somes, brakeman, Detroit Junction, struck by bridge.

November 4. B. Berringer, coupler, Detroit Junction, coupling.

November 13. J. Kehoe, switchman, Detroit Junction, coupling.

November 21. N. Farwell, brakeman, Mount Clemens, fell off van.

November 8. W. Gray, porter, Detroit, fell between cars.

December 14. E. Fawcett, newsboy, Milwaukee Junction, fell off train.

December 31. W. G. Hopkins, brakeman, Detroit, Miller coupling slipped.

## TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | 10 | |
| Derailments | | | | | | |
| Falling from trains | | | | | 3 | |
| Frogs | | 2 | | | | |
| Getting on and off trains | | | | | 1 | |
| Highway crossings | | | | | | |
| Miscellaneous | | 1 | 1 | | 6 | |
| Overhead obstructions | | | | | 2 | |
| Stealing rides | | | | | | |
| Trespassers | | | 1 | | | |
| Total | | 3 | 2 | | 22 | |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Mumber of persons killed during the year on the entire line, | 5 |
| Same for Michigan, | 5 |
| Number of persons injured during the year on the entire line, | 22 |
| Same for Michigan, | 22 |
| Number of casualties purely accidental in Michigan, | 5 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 22 |
| Trespassers and tramps killed or injured in Michigan, | 1 |

U. S. CONSULATE,
CITY OF MONTREAL, CAN. } ss.

William J. Spicer, Superintendent of the Chicago, Detroit & Canada Grand Trunk Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), W. J. SPICER,
*Superintendent.*

Subscribed and sworn to before me, this 26th day of April, A. D. 1882.

[L. S.] J. Q. SMITH,
*U. S. Consul General at Montreal.*

# ANNUAL REPORT

OF THE

# CHICAGO & NORTHWESTERN RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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This report covers the entire Chicago and Northwestern Railway system, including the Menominee River and Escanaba and Lake Superior Railways, detailed reports of which are given separately.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* ALBERT KEEP, Chicago, Ills.
*Vice President,* / *Secretary,* / *Treasurer,* M. L. SYKES, New York, N. Y.
*General Manager,* MARVIN HUGHITT, Chicago, Ills.
*General Superintendent,* J. D. LAYNG, Chicago, Ills.
*Division Superintendents,*
- WM. B. LINSLEY, Escanaba, Mich.
- CHAS. D. GORHAM, Chicago, Ills.
- CHAS. MURRAY, Chicago, Ills.
- JOHN M. WHITMAN, Clinton, Iowa.
- HORACE G. BURT, Eagle Grove, Iowa.
- CURTIS A. SWINEFORD, Baraboo, Wis.
- SHERBURN SANBORN, Winona, Minn.
- T. J. NICHOLL, Huron, Dak.

*Chief Engineer,* E. H. JOHNSON, Chicago, Ill.
*Superintendent of Telegraph,* G. H. THAYER, Chicago, Ill.
*Comptroller,* M. M. KIRKMAN, Chicago, Ill.
*Auditor,* J. B. REDFIELD, Chicago, Ill.
*General Passenger Agent,* W. H. STENNETT, Chicago, Ill.
*General Freight Agent,* C. G. EDDY, Chicago, Ill.
*Attorney,* B. C. COOK, Chicago, Ill.

## DIRECTORS.

A. G. DULMAN, New York, N. Y.
M. L. SYKES, New York, N. Y.
AUGUSTUS SCHELL, New York, N. Y.
CHAUNCEY M. DEPEW, New York, N. Y.
SAMUEL F. BARGER, New York, N. Y.

Term expires June, 1882.

ALBERT KEEP, Chicago, Ill.
DAVID DOWS, New York, N. Y.
SIDNEY DILLON, New York, N. Y.
D. O. MILLS, New York, N. Y.
JOHN M. BURKE, New York, N. Y.
MARVIN HUGHITT, Chicago, Ill.

Term expires June, 1883.

JAY GOULD, New York, N. Y.
C. J. OSBORN, New York, N. Y.
R. J. FLOWER, New York, N. Y.
F. W. VANDERBILT, New York, N. Y.
WM. L. SCOTT, Erie, Pa.
ANSON STAGER, Chicago, Ill.

Term expires June, 1884.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 1,341 |
| Number of stockholders in Michigan at same date, | 3 |
| Amount of full-paid stock held in Michigan at same date, | $13,200 00 |

Date of annual meeting of stockholders,—first Thursday in June.
Fiscal year of company ends May 31st.
General offices of the company are located at Chicago, Ill.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $21,849,210 72 |
| Total expense, including taxes, | $11,556,892 23 | |
| Net income, | | $10,292,318 49 |
| Interest on funded debt, | $3,838,046 82 | |
| Interest on unfunded debt, | | |
| Sinking funds, | 98,120 00 | |
| Rentals, | 1,482,247 86 | |
| | | 5,418,414 68 |
| Balance applicable to dividends, | | $4,873,903 81 |
| Dividends declared—7 per cent on preferred stock, 6 per cent on common stock, | $2,438,139 00 | |
| Balance for the year, | | $2,435,764 81 |

| | | | |
|---|---|---|---|
| Balance (profit and loss) last year, as reported, . . | $9,055,636 96 | | |
| Less losses in operating proprietary roads, May 31 to December 31, 1880, . . | 616,517 71 | | |
| | | | $8,439,119 25 |
| | | | $10,874,884 06 |
| Less advances made to sundry proprietary railroads (charged to income account, Dec. 31, 1881), . . . . . | | $2,926,461 13 | |
| Balance forward to next year, . . . | | $7,948,422 93 | |
| | | $10,874,884 06 | $10,874,884 06 |

ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | No fixed amount. |
| Par value of shares, . . . | $100.00 | | |
| Amount outstanding [No. of shares, ——], including stock of proprietary railroads, . | | $58,488,861 09 | |
| Common stock outstanding, including stock of proprietary railroads, . . . . | | 36,338,183 37 | |
| Preferred stock, outstanding, including stock of proprietary railroads, . . . . | | 22,150,722 72 | |
| Total amount outstanding as per books of the company, including stock of proprietary railroads, . . . | | | $58,488,861 09 |
| Amount paid in per mile of road owned by company, (2,730.96 miles), . . . . . | | | $21,416 96 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| CLASS OF BONDS. | When Due. | Rate of Interest. | Interest Payable. | Amount. |
|---|---|---|---|---|
| Preferred Sinking Fund | Aug. 1, 1885 | 7 per cent | Feb. 1 and Aug. 1 | $971,400 00 |
| Funded coupon | Nov. 1, 1883 | 7 per cent | May 1 and Nov. 1 | 676,300 00 |
| General 1st Mortgage | Aug. 1, 1885 | 7 per cent | Feb. 1 and Aug. 1 | 3,440,300 00 |
| Appleton Extension | Aug. 1, 1885 | 7 per cent | Feb. 1 and Aug. 1 | 116,000 00 |
| Green Bay Extension | Aug. 1, 1885 | 7 per cent | Feb. 1 and Aug. 1 | 180,000 00 |
| Galena & Chicago Union R. R., 1st Mort. | Feb. 1, 1882 | 7 per cent | Feb. 1 and Aug. 1 | 1,632,000 00 |
| Mississippi River Bridge | Jan. 1, 1884 | 7 per cent | Jan. 1 and July 1 | 153,000 00 |
| Beloit & Madison 1st Mortgage | Jan. 1, 1888 | 7 per cent | Jan. 1 and July 1 | 188,000 00 |
| Peninsula R. R. 1st Mortgage | Sept. 1, 1898 | 7 per cent | March 1 and Sept. 1 | 261,000 00 |
| Consolidated Sinking Fund | Feb. 1, 1915 | 7 per cent | Feb. 1 and May 1; Aug. 1 and Nov. 1 | 5,269,000 00 |
| Madison Extension | April 1, 1911 | 7 per cent | April 1 and Oct. 1 | 3,150,000 00 |
| Menominee Extension | June 1, 1911 | 7 per cent | June 1 and Dec. 1 | 2,700,000 00 |
| General Consolidated Gold | Dec. 1, 1902 | 7 per cent | June 1 and Dec. 1 | 12,343,000 00 |
| Consolidated Sinking Fund of 1879 | Oct. 1, 1929 | 6 per cent | April 1 and Oct. 1 | 6,305,000 00 |
| Consolidated Sinking Fund of 1879 | Oct. 1, 1929 | 5 per cent | April 1 and Oct. 1 | 4,020,000 00 |
| W. & St. P. R. R. 1st Mortgage | Jan. 1, 1887 | 7 per cent | Jan. 1 and July 1 | 2,547,000 00 |
| W. & St. P. R. R. 2d Mortgage | Nov. 1, 1907 | 7 per cent | May 1 and Nov. 1 | 1,607,000 00 |
| W. & St. P. R. R. Extension Gold | Dec. 1, 1916 | 7 per cent | June 1 and Dec. 1 | 4,255,000 00 |
| Minn. Valley Railway, 1st Mortgage | Oct. 1, 1908 | 7 per cent | April 1 and Oct. 1 | 150,000 00 |
| Rochester & No. Minn. R'y 1st Mort. | Sept. 1, 1908 | 7 per cent | March 1 and Sept. 1 | 200,000 00 |
| Plainview R. R. 1st Mortgage | Sept. 1, 1908 | 7 per cent | March 1 and Sept. 1 | 100,000 00 |
| Iowa Mid. Railway 1st Mort. | Oct. 1, 1900 | 8 per cent | April 1 and Oct. 1 | 1,350,000 00 |
| Chicago & Milwaukee R'y 1st Mort. | July 1, 1898 | 7 per cent | Jan. 1 and July 1 | 1,700,600 00 |
| Northwest Union Railway 1st Mort. | June 1, 1917 | 7 per cent | March 1 and Sept. 1 | 3,500,000 00 |
| Chicago & Tomah R. R. 1st Mortgage | Nov. 1, 1905 | 6 per cent | May 1 and Nov. 1 | 1,528,000 00 |
| Milwaukee & Mad. R'y 1st Mortgage | Sept. 1, 1905 | 6 per cent | March 1 and Sept. 1 | 1,600,000 00 |
| Menominee River R. R. 1st Mortgage | July 1, 1906 | 7 per cent | Jan. 1 and July 1 | 400,000 00 |
| Menominee River R. R. Ext. 1st Mort. | July 1, 1906 | 7 per cent | Jan. 1 and July 1 | 160,000 00 |
| Escanaba & Lake Superior R'y 1st Mort. | July 1, 1901 | 6 per cent | Jan. 1 and July 1 | 555,000 00 |
| Total | | | | $61,057,000 00 |

Total amount of funded debt, including funded debt of proprietary railroads, - - - - - - $61,057,000 00

### FLOATING DEBT.

Current credit balances, etc., - - - - - - 3,856,841 77

Total debt liabilities, - - - - - - - $64,913,841 77

| | | |
|---|---|---|
| Amount of debt liabilities per mile of road, | Funded debt, 2,730.96 miles, | $22,357 34 |
| | Other debt, 3,218.47 miles, | 1,198 34 |
| Total, | | $23,555 68 |

| | |
|---|---|
| Amount of liabilities, after deducting all assets not representing permanent investments, | $60,936,408 89 |

## *COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, including cost of proprietary railroads (2,730.96 miles), | $127,043,982 62 |
| Average cost of same per mile, | 46,519 90 |
| Proportion of cost of road and equipment for Michigan, (222.62 miles), | 10,356,259 85 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension or alteration of road, | $385,042 21 |
| Branches, extension or alteration of road, specifying each, | |
| Double track extension, | |
| Land, right of way and depot grounds, | 93,691 12 |
| Passenger and freight stations, wood-sheds, and water stations, | 292,457 93 |
| Engine-houses, car-sheds, and turn-tables, | |
| New locomotives, | 1,925,735 82 |
| New snow plows, | |
| New passenger cars, | |
| New mail and baggage cars, | |
| New freight cars, | |
| New fences, gates, and crossings, | 7,080 29 |
| Any other expenditures charged to property account (specifying the same): | |
| Construction of permanent bridges (cost of new over old), | 181,174 32 |
| Add: The "Cost of Road" accounts of sundry proprietary roads not heretofore included in the reports of this company, | 49,340,134 50 |
| Total increase over the amount shown in report to Michigan State Commissioner for the year ending December 31st, 1880, | $52,225,316 19 |
| Net addition to property account for the year, | 52,225,316 19 |

* This "cost of road and equipment" includes construction charges upon 487.51 miles of leased roads—not included in this number of miles.

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $4,693,518 96 | |
| From through passengers, | | |
| From express and baggage, | 347,033 33 | |
| From mails, | 390,704 09 | |
| Total earnings, passenger department, | | $5,431,256 38 |
| Earnings per train mile run [2,889,563 miles], | $1 87.9 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | | |
| From through traffic, | | |
| From other sources, freight department, | | |
| Total earnings freight department, | | $16,250,562 00 |
| Earnings per train mile run [7,987,775 miles], | $2 03.4 | |
| Total transportation earnings, | | $21,681,818 38 |
| Earnings per mile of road operated [2,857.50 average miles], | $7,587 69 | |
| Earnings per train mile run, from all trains earning revenue [10,877,338 miles], | $1 99.3 | |
| Proportion of earnings for Michigan (212.20 average miles), | 1,610,107 37 | |
| Income from all other sources: | | |
| Miscellaneous earnings, | | 167,392 34 |
| Total income from all sources, | | $21,849,210 72 |
| Proportion of income for Michigan, | $1,622,538 06 | |

### EXPENSES.

#### CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $1,368,168 17 |
| Renewal of rails, | 519,881 32 |
| Renewal of ties, | 297,686 43 |
| Repairs of bridges, including culverts and cattle guards, | 475,109 68 |
| Repairs of fences, road crossings, and signs, | 104,745 19 |
| Repairs of buildings, | 418,642 92 |
| Total, | $3,184,233 71 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $726,981 49 |
| Repairs of passenger cars, | 219,686 50 |
| Repairs of freight cars, | 637,031 39 |
| Total, | $1,583,699 38 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $1,370,900 41 |
| Water-supply, | 74,486 80 |
| Oil and waste, | 161,034 54 |
| Locomotive service, | 1,144,383 47 |
| Passenger train service, | 189,857 69 |
| Passenger train supplies, | 51,782 75 |
| Mileage of passenger cars (debit balance), | 4,667 30 |
| Freight train service, | 523,393 87 |
| Freight train supplies, | 55,761 34 |
| Mileage of freight cars (debit balance), | 57,888 51 |
| Telegraph expenses (maintenance and operating), | 124,656 77 |
| Damage and loss of freight and baggage, | 44,122 75 |
| Damages to property and cattle, | 42,091 19 |
| Personal injuries, | 108,900 76 |
| Agents and station service, | 1,811,460 42 |
| Station supplies, | 59,401 23 |
| Total, | $5,824,789 80 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $52,642 26 |
| Salaries of clerks in general offices, | | 78,963 39 |
| Law expenses, | | 25,344 80 |
| Insurance, | | 1,573 75 |
| Stationery and printing, | | 80,173 42 |
| Outside agencies and advertising, | | 137,913 29 |
| Contingencies, | | 119,636 84 |
| Taxes in Michigan, | $54,316 12 | |
| Taxes in other States, | 413,605 47 | |
| | | 467,921 59 |
| Total, | | $964,169 34 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $3,184,233 71 |
| Maintenance of motive power and cars, | | 1,583,699 38 |
| Conducting transportation, | | 5,824,789 80 |
| General expenses, including taxes, | | 964,169 34 |
| Total operating expenses and taxes, | | $11,556,892 23 |
| Operating expenses and taxes per mile of road, | $4,044 41 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [10,877,338 miles], | $1 06.2 | |

| | | |
|---|---|---|
| Proportion of operating expenses and taxes for Michigan, | $858,223 80 | |
| Per centage of expenses to earnings, | 53.30 | |
| Net earnings per mile of road, | $3,543 28 | |
| Net earnings per train mile, | $0 93.1 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $127,043,982 62 |
| Equipment account, | | |
| Other investments (specifying same): | | |
| Securities owned, | $129,710 29 | |
| Real estate contract, | 200,000 00 | |
| | | 329,710 29 |
| Cash items: | | |
| Cash, | $1,167,355 71 | |
| Bills receivable, | 87,446 79 | |
| Due from agents and companies, | 845,390 16 | |
| | | 2,100,192 66 |
| Other assets: | | |
| Materials and supplies, | $1,800,382 22 | |
| Debit balances, | 76,858 00 | |
| | | 1,877,240 22 |
| Total assets, | | $131,351,125 79 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $58,488,861 09 |
| Funded debt, | | 61,057,000 00 |
| Unfunded debt: | | |
| Interest unpaid, | $523,387 99 | |
| Dividends unpaid, | 63,837 62 | |
| Notes payable, | 454,774 10 | |
| Vouchers and accounts, | 1,587,884 79 | |
| Other liabilities: | | |
| Due leased lines, | 384,777 91 | |
| Land grant account, | 476,179 36 | |
| Redemption of bonds, | 366,000 00 | |
| | | 3,856,841 77 |
| Profit and losss, or income accounts, | | 7,948,422 93 |
| Total liabilities, | | $131,351,125 79 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:

IN MICHIGAN.

From Escanaba to Negaunee, . . . . . 62.00 miles in 1864.
From Negaunee to Lake Angeline, . . . . 6.00 miles in 1870.
From Marinette to Escanaba, . . . . . 64.65 miles in 1872.
From Menominee River Junction to Quinnesec, . 24.71 miles in 1877.
From Quinnesec to Menominee River, . . . . 15.04 miles in 1880.
From a point 4.49 miles north of Florence, north (Crystal Falls Extension), . . . . . 5.22 miles in 1881.
From Deerfield, northwest, . . . . . 5.20 miles in 1881.
From branches to mines, . . . . . 39.80 miles, various dates.

MILES OF ROAD DECEMBER 31, 1881.

| DIVISIONS. | Total Miles. | In Illinois. | In Wisconsin. | In Michigan. | In Iowa. | In Minnesota. | In Dakota. | Leased. |
|---|---|---|---|---|---|---|---|---|
| WISCONSIN. | | | | | | | | |
| From Chicago to Ft. Howard | 245.83 | 70.80 | 175.03 | ..... | ..... | ..... | ..... | ..... |
| " W. C. Shops to Montrose | 5.20 | 5.20 | ..... | ..... | ..... | ..... | ..... | ..... |
| " Chicago to Milwaukee | 85.00 | 44.76 | 40.24 | ..... | ..... | ..... | ..... | ..... |
| " Kenosha to Rockford | 72.10 | 44.60 | 27.50 | ..... | ..... | ..... | ..... | ..... |
| " Janesville to Afton | 6.10 | ..... | 6.10 | ..... | ..... | ..... | ..... | ..... |
| " Sheboygan to Princeton | 78.40 | ..... | 78.40 | ..... | ..... | ..... | ..... | ..... |
| N. W. U. | | | | | | | | |
| From Milwaukee to Fondulac | 62.63 | ..... | 62.63 | ..... | ..... | ..... | ..... | ..... |
| GALENA. | | | | | | | | |
| From Chicago to Mississippi River | 137.00 | 137.00 | ..... | ..... | ..... | ..... | ..... | ..... |
| " Chicago to Freeport | 121.00 | 121.00 | ..... | ..... | ..... | ..... | ..... | ..... |
| " Elgin to Lake Geneva | 45.04 | 36.34 | 8.70 | ..... | ..... | ..... | ..... | ..... |
| " St. Charles to Batavia | 5.60 | 5.60 | ..... | ..... | ..... | ..... | ..... | ..... |
| " South Branch Junction to River | 4.50 | 4.50 | ..... | ..... | ..... | ..... | ..... | ..... |
| C. I. & N. R. R. | | | | | | | | |
| From E. end Miss. R. Bridge to Cedar Rap. | 82.40 | ..... | ..... | ..... | 82.40 | ..... | ..... | 82.40 |
| C. R. & M. R. R. R. | | | | | | | | |
| From Cedar Rapids to Council Bluffs | 271.60 | ..... | ..... | ..... | 271.60 | ..... | ..... | 271.60 |
| " Clinton to Lyons | 2.60 | ..... | ..... | ..... | 2.60 | ..... | ..... | 2.60 |
| MAPLE RIVER. | | | | | | | | |
| From Maple River Junction to Mapleton | 60.15 | ..... | ..... | ..... | 60.15 | ..... | ..... | 60.15 |
| " Wall Lake to Sac City | 12.76 | ..... | ..... | ..... | 12.76 | ..... | ..... | 12.76 |
| IOWA RAILWAY COAL & M. | | | | | | | | |
| From Boone to Coal Banks | 3.25 | ..... | ..... | ..... | 3.25 | ..... | ..... | ..... |
| DES. M. & M. R. R. | | | | | | | | |
| From Des Moines to Callanan | 58.00 | ..... | ..... | ..... | 58.00 | ..... | ..... | 58.00 |
| T. & H. W. RAILWAY. | | | | | | | | |
| From Tama to Elmore | 164.22 | ..... | ..... | ..... | 164.22 | ..... | ..... | ..... |
| " Jewell Junction to Stratford | 15.03 | ..... | ..... | ..... | 15.03 | ..... | ..... | ..... |
| " Dayton to Lake City | 34.11 | ..... | ..... | ..... | 34.11 | ..... | ..... | ..... |
| " Eagle Grove to Willow Glen | 29.81 | ..... | ..... | ..... | 29.81 | ..... | ..... | ..... |
| IOWA SOUTHWESTERN RAILWAY. | | | | | | | | |
| From Carrol to Kirkman | 34.81 | ..... | ..... | ..... | 34.81 | ..... | ..... | ..... |
| Audubon Branch | 2.10 | ..... | ..... | ..... | 2.10 | ..... | ..... | ..... |
| S. & T. | | | | | | | | |
| From Stanwood to Tipton | 8.50 | ..... | ..... | ..... | 8.50 | ..... | ..... | ..... |
| I. M. RAILWAY. | | | | | | | | |
| From Lyons to State Quarries | 70.97 | ..... | ..... | ..... | 70.67 | ..... | ..... | ..... |
| MADISON. | | | | | | | | |
| From Galena to Woodman | 76.84 | 10.25 | 66.59 | ..... | ..... | ..... | ..... | ..... |
| " Lancaster Junction to Lancaster | 12.04 | ..... | 12.04 | ..... | ..... | ..... | ..... | ..... |
| " Platteville Junction to Platteville | 4.00 | ..... | 4.00 | ..... | ..... | ..... | ..... | ..... |
| " Milwaukee to Montfort | 141.33 | ..... | 141.33 | ..... | ..... | ..... | ..... | ..... |
| " Belvidere to Madison | 68.90 | 20.10 | 48.80 | ..... | ..... | ..... | ..... | ..... |
| " Winona Junction to Winona | 29.00 | ..... | 29.00 | ..... | ..... | ..... | ..... | ..... |

MILES OF ROAD DECEMBER 31, 1881.—CONTINUED.

| DIVISIONS. | Total Miles. | In Illinois. | In Wisconsin. | In Michigan. | In Iowa. | In Minnesota. | In Dakota. | Leased. |
|---|---|---|---|---|---|---|---|---|
| MADISON EXTENSION. | | | | | | | | |
| From Madison to Winona Junction | 129.10 | ------- | 129.10 | ------- | ------- | ------- | ------- | ------- |
| PENINSULAR. | | | | | | | | |
| From Fort Howard to Ishpeming and Branches to mines | 221.90 | ------- | ------- | 49.45 | 172.45 | ------- | ------- | ------- |
| From Men. River Junction to Florence | 52.65 | ------- | 12.90 | 39.75 | ------- | ------- | ------- | ------- |
| " Florence north | 9.71 | ------- | 4.49 | 5.22 | ------- | ------- | ------- | ------- |
| " Deerfield northwest | 5.20 | ------- | ------- | 5.20 | ------- | ------- | ------- | ------- |
| W. & ST. P. | | | | | | | | |
| From Winona to Lake Kampeska | 327.00 | ------- | ------- | ------- | ------- | 288.50 | 38.50 | ------- |
| " Chatfield Junction to Chatfield | 11.46 | ------- | ------- | ------- | ------- | 11.46 | ------- | ------- |
| " Plainview Junction to Plainview | 15.01 | ------- | ------- | ------- | ------- | 15.01 | ------- | ------- |
| " Rochester to Yumbrota | 24.48 | ------- | ------- | ------- | ------- | 24.48 | ------- | ------- |
| " Mankato Junction to Mankato | 3.75 | ------- | ------- | ------- | ------- | 3.75 | ------- | ------- |
| " Sleepy Eye Junc. to Redwood Falls | 24.40 | ------- | ------- | ------- | ------- | 24.40 | ------- | ------- |
| " Tracy to Dakota Line | 46.40 | ------- | ------- | ------- | ------- | 46.40 | ------- | ------- |
| DAKOTA. | | | | | | | | |
| From Minn. State Line to Pierre | 209.11 | ------- | ------- | ------- | ------- | ------- | 209.11 | ------- |
| " Ordway Junction to Ordway | 87.48 | ------- | ------- | ------- | ------- | ------- | 87.48 | ------- |
| Total | 3,218.47 | 500.15 | 896.30 | 222.62 | 850.31 | 414.00 | 335.09 | 487.51 |

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 222 62 | |
| Length completed in Illinois, | 500 15 | |
| Length completed in Wisconsin, | 896 30 | |
| Length completed in Iowa, | 850 31 | |
| Length completed in Minnesota, | 414 00 | |
| Length completed in Dakota, | 335 09 | |
| Total length completed, | | 3,218 47 |
| Total length of road belonging to this company, | | 3,218 47 |
| Total length of road belonging to this company in Michigan, | 222 62 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 440 19 |
| Same in Michigan, | 39 28 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 3,658 66 |
| Same in Michigan, | 261 90 | |
| Gauge of track, 3 feet, — inches, | 113 88 | |
| Gauge of track, 4 feet, 8½ inches. | 3,104 59 | |
| Total length of tracks laid with steel rails, weight per yard, 50 to 60 lbs., | | 2,167 32 |
| Total length of tracks laid with iron rails, weight per yard, 30 to 60 lbs. | | 1,051 15 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Name, description, and length of each: | | |
| Chicago, Iowa & Nebraska R. R., | 82 40 | |
| Cedar Rapids and Mo. River R. R., | 274 20 | |
| Maple River R. R., | 72 91 | |
| Des Moines & Minneapolis R. R. | 58 00 | |
| Total length of above roads, | | 487 51 |
| Total length of above roads in other States, specifying each: | | |
| Iowa, | 487 51 | |
| Total miles of road operated by this company, | | 3,218 47 |
| Total miles of road operated by this company in Michigan, | 222 62 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 7; aggregate length, feet, | 1,660 |
| Combination iron and wood, | 2; aggregate length, feet, | 352 |
| Wooden trestles, | 87; aggregate length, feet, | 11,630 |
| Total, | 96 | 13,642 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 243 |
| Stone, number, | 1 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 31 |
| Number of cattle guards renewed during the year, | 1 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Marquette, Houghton & Ontonagon R. R. at Lake Angeline.

What railroads cross your road either over or under your grade in this State, and where?
Marquette, Houghton & Ontonagon R. R. at Negaunee.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 30 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 3 |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | None. |
| Number of crossings of highways under railroad, | 1 |
| Number of highway bridges 18 feet above track, | None. |
| Number of highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions? | No. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, at which there are buildings and agents, | 460 |
| Same in Michigan, at which there are buildings and agents, | 17 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 15,357 |
| Same in Michigan, | 1,430 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 101.30 |
| What is the average cost per rod? | $1 09 | |
| The total cost of same? | $35,488 00 | |
| How many miles of new fencing have you built during the year? | | 30.31 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | |
| In Menominee county, | | 102.20 |
| In Delta county, | | 61.10 |
| In Marquette county, | | 128.20 |
| Total miles, | | 291.50 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 33 |
| Average length of sections,—about | 6.80 miles. |
| Number of men in each section gang, | 6 |
| Number of new ties put in whole line during the year, | 1,614,329 |
| Number of new ties put in track in Michigan, | 381,851 |
| Average number of new ties per mile of road,—about | 402 |

New rails put in track:

On the lines of this company there have been laid 182.67 miles of steel rail during the year (replacing iron rail).

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 331 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 172 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 15 |
| Number of passenger cars—12-wheel, | 83 |

| | |
|---|---|
| Number of passenger cars—8-wheel, | 130 |
| Number of express and baggage cars, | 89 |
| Number of box freight cars, | 7,548 |
| Number of stock cars, | 1,409 |
| Number of platform cars, | 1,800 |
| Number of ore cars, | 3,357 |
| Number of conductors' way cars, | 237 |
| Other cars as follows: Parlor cars, 3; officers' cars, 4; ditching cars, 40; dining cars, 4; boarding cars, 18; mail cars, 18; dump cars, 25; derrick cars, 19, | 131 |
| Number of locomotives equipped with train-brake, | 207 |
| Number of cars used in passenger trains equipped with train-brake. | All. |
| What kind of train-brake is in use on your road? | Westinghouse air-brake. |
| Number of passenger train cars with Miller platform and buffer, | All. |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 2,889,563 |
| Miles run by freight trains during the year, | 7,987,775 |
| Total mileage of trains earning revenue, | 10,877,338 |
| Miles run by work trains during the year, | 736,597 |
| Miles run by switching trains, | 3,428,001 |
| Total train mileage, | 15,041,936 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 4 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 112 |
| Average number of cars in freight trains, | 20 |
| Average weight of freight trains, exclusive of freight,—tons, | 210 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Total number of passengers carried, | 5,195,536 | | |
| Total passenger mileage, or passengers carried one mile, | 190,158,648 | | |
| Average distance traveled by each passenger, | | 37.15 | |
| Average amount received from each passenger, | | | $0.90.33 |

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Highest rate of fare per mile, for any distance, | | | $0.04.00 |
| Lowest rate of fare per mile, for any distance, | | | 00.92 |
| Average rate of fare per mile, for all passengers, | | | 02.46 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Total tons of freight carried, | 7,595,592 | | |
| Total freight mileage, or tons carried one mile, | 1,101,428,492 | | |
| Average ton haul for all freight, | | 143.7 | |
| Average amount received for each ton haul, | | | $2.13.00 |
| Average rate per ton per mile, received for all freight, | | | 01.48 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 1,184,977 | 15.60 |
| Flour, | 209,328 | 2.76 |
| Provisions (beef, pork, lard, etc.) | 74,751 | .98 |
| Animals, | 316,059 | 4.16 |
| Other agricultural products, | 110,824 | 1.46 |
| Lumber and forest products, | 1,018,563 | 13.41 |
| Coal, | 752,186 | 9.90 |
| Cement, | 9,402 | .12 |
| Salt, | 36,270 | .48 |
| Petroleum, | 32,457 | .43 |
| Railroad iron,—iron and steel rails, | 183,677 | 2.42 |
| Pig and bloom iron, | 170,926 | 2.25 |
| Other iron and castings, | 138,934 | 1.83 |
| Ores, | 1,708,910 | 22.50 |
| Stone and brick, sand and clay, | 137,808 | 1.81 |
| Manufactures,—articles shipped from point of production, | 73,079 | .96 |
| Merchandise and other articles not enumerated above, | 1,437,441 | 18.93 |
| Total tons carried, | 7,595,592 | 100. |

## ADDITIONAL QUESTIONS

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company and United States Express Company. For terms and conditions as to rates see statement following. The express companies have no care of machinery or repairs of cars. They do a miscellaneous business restricted to lighter articles properly belonging to express business. The express companies deliver their freight into this company's cars.

*Express Contracts,—December 31st, 1881.*

| ROUTE. | Rate Per Diem on Limited Tonnage. | | Limit of pounds to be Carried each Day whole Length of Route at Regular Per Diem Rates. | Rate per 100 lbs. Carried whole Length of Route to be Paid on Excess of Tonnage. | Tonnage Per week of Six Days. | Tonnage Per week of Seven Days. |
|---|---|---|---|---|---|---|
| | Whole Route. | Sub-Division. | | | | |
| *American Express Company.* | | | | | | |
| Chicago to Council Bluffs | $275 00 | | 10,000 | $1 50 | 60,000 | 70,000 |
| Chicago to Mississippi River | | $106 97 | | | | |
| Mississippi River Bridge | | 2 75 | | | | |
| Chicago, Iowa & Nebraska R. R. | | 59 34 | | | | |
| C. Rapids & Missouri River R. R. | | 105 94 | | | | |
| Chicago to Freeport | 90 00 | | 12,000 | 50 | 72,000 | 84,000 |
| Chicago to Ishpeming (Fish $1.00 per 100 lbs.) | 250 00 | | 10,000 | 1 50 | 60,000 | 70,000 |
| Chicago to Fort Howard | | 113 38 | | | | |
| Fort Howard to Ishpeming (including Men. River R. R.) | | 81 97 | | | | |
| Chicago to Milwaukee | | 31 38 | | | | |
| Milwaukee to Fon du Lac | | 23 27 | | | | |
| Chicago to Winona | 135 00 | | 10,000 | 1 05 | 60,000 | 75,000 |
| Chicago to Caledonia Junction | | 35 10 | | | | |
| Caledonia Junction to Madison | | 28 35 | | | | |
| Madison to Winona Junction | | 58 05 | | | | |
| Winona Junction to Winona | | 13 50 | | | | |
| W. & St. P. R. R. & branches | 75 00 | | 5,000 | 1 50 | 30,000 | 35,000 |
| Kenosha to Rockford | 5 07 | | 1,000 | 60 | 6,000 | 7,000 |
| Elgin to Geneva Lake | 5 00 | | 2,000 | 25 | 12,000 | 14,000 |
| Galena to Woodman | 10 00 | | 2,500 | 40 | 15,000 | 17,500 |
| Clinton to Anamosa | 6 25 | | 1,000 | 30 | 6,000 | 7,000 |
| Lyons Branch | | 21 | | | | |
| Iowa Mid. Railway | | 6 04 | | | | |
| Stanwood to Tipton | 2 00 | | 500 | | 3,000 | 3,500 |
| Tama to Webster City | 6 25 | | 1,000 | 40 | 6,000 | 7,000 |
| Des Moines to Callanan | 10 00 | | 2,000 | 35 | 12,000 | 14,000 |
| Maple River R. R. & branches | 6 25 | | 1,000 | 30 | 6,000 | 7,000 |
| *United States Express Company.* | | | | | | |
| Chicago to Milwaukee | 66 66 | | 17,000 | 40 | 102,000 | 119,000 |

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

The cars of all transportation companies are allowed to run over the lines of this company, paying regular rates and receiving mileage.

The freight is carried in cars furnished by such transportation companies (excepting consignments of less than a car-load).

Their freight has no preference over other freight of like class.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Ames Coal T. Co., Chicago, Ill., | $118 12 |
| And. Refr. Co., Chicago, Ill., | 276 04 |
| Arnot, Elmira, N. Y., | 24 54 |
| Chicago & Wil. Coal Co., Chicago, Ill., | 497 06 |

| | |
|---|---|
| Carp. River Iron Company, Marquette, Mich., | $272 51 |
| Eureka Coal Co., Chicago, Ill., | 101 29 |
| Menasha W. Ware Co., Menasha, Wis., | 323 36 |
| W. P. Rend & Co., Chicago, Ill., | 182 41 |
| Ramsey & Jones, Appleton, Wis., | 81 84 |
| Tiffany Refr. Co., Chicago, Ill., | 43.01 |
| Pullman Palace Car Co., Chicago, Ill., | 14,425 00 |
| | $16,345 18 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Sleeping cars are run, for the use of which this company furnishes light and fuel, and keeps in order the exterior of the cars. They are owned by the Pullman Palace Car Co., and all charges in addition to regular fare are made and collected by that company.

Parlor or dining cars are not run in the State of Michigan.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Pullman Palace Car Co., $14,425.00.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

There is no permanently fixed compensation for mail service on the line of this road; service being ordered by the Post Office Department, from time to time, subject to the rules and regulations of the department.

There are about forty different postal routes on this company's lines, on which the mails are periodically weighed, and compensation regulated in accordance with the results.

*Telegraph,—In Michigan.*

Number of miles of telegraph owned by company, . . . None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Northwestern Telegraph Company (leased to Western Union Telegraph Company), about 162½ miles.

REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

KILLED.

January 18. P. Beauchamp, laborer, Escanaba, fell off ore dock; accidental.

February 16. C. Jones, switchman, Ishpeming, car went down embankment; accidental.

March 8. W. E. Dawson, brakeman, Menominee River Junction, coupling cars; lack of caution.

July 16. John J. Keenan, brakeman, Menominee River Junction, fell between cars; lack of caution.

July 24. E. M. Nicholson, telegraph operator, Escanaba, fell from caboose —run over; lack of caution.

August 5. John Burke, brakeman, Sturgeon River Bridge, fell from car—run over; lack of caution.

August 6. John Cain, citizen, Bark River, drunk and asleep on track; trespasser.

August 12. John Webb, citizen, Negaunee, fell in attempt to board car; carelessness.

August 13. Peter St. Peter, citizen, Section 45 Quarry, struck by train; lack of caution.

August 22. John Welch, citizen, Norway, drunk and sleeping on track, trespasser.

September 3. Augt. Barry, laborer, Spalding, laying on track drunk—run over; carelessness.

September 19. Michael Bailey, citizen, Quinnesec, drunk and sleeping on track; trespasser.

November 20. W. Dorham, laborer, near Ferry, drunk, struck by train; carelessness.

INJURED.

January 10. W. Donnelly, brakeman, Menominee, coupling cars; want of caution.

January 22. J. Boadien, brakeman, Negaunee, coupling cars; want of caution.

February 2. J. Stagier, brakeman, Menominee, coupling cars; want of caution.

June 1. Name unknown, brakeman, Ferry, uncoupling engine, fell under cars; accidental.

June 17. Frank Roach, brakeman, Norway, foot crushed between tender and freight car by breaking of drawbar on which he was standing; lack of caution.

July 19. J. P. Wallen, brakeman, Stephenson, switching; want of caution.

July 16. Chas. Drum, brakeman, Wallace, coupling; want of caution.

July 23. Homer Millard, brakeman, Wacedah, slipped in boarding car; want of caution.

July 29. John Casey, brakeman, Negaunee, fell from car; want of caution.

August 4. John Smith, switchman, N. Y. Mine, getting on engine; carelessness.

August 19. Pat Butler, laborer, Escanaba, walking over pit with timber, fell; want of caution.

August 20. Byron Smith, brakeman, Deerfield, climbing on car; want of caution.

August 23. F. Kiefer, laborer, Quinnesec, stepping between ties, fell; want of caution.

August 29. John Carlson, carpenter, Escanaba, cut by saw; carelessness.

August 25. John Mullockrey, brakeman, Day's River, fell from car; carelessness.

August 6. Frank De Moss, laborer, Escanaba, unloading ore; want of caution.

August 28. C. Ryan, miner, Norway, railing gave way; accidental.

September 5. L. Richron, miner, Ruprecht's, stepped on track; carelessness.

September 8. F. Rolewitch, laborer, Dock No. 2, climbing on car; carelessness.

September 29. John Swanson, laborer, Escanaba, fell into empty ore socket; carelessness.

November 1. Mr. Wilcox, farmer, Carney, jumped off train; carelessness.

November 4. C. Olson, section hand, Palmer Mine, riding on pilot; carelessness.

November 4. R. Eagles, section hand, Palmer Mine, riding on pilot; carelessness.

November 4. G. Willbranson, section hand, Palmer Mine, riding on pilot; carelessness.

November 11. F. Conners, switchman, Negaunee, fell from ore car; carelessness.

November 15. D. McCurdy, switchman, Quinnesec, coupling; want of caution.

November 18. F. Borine, conductor, Partridge, train broke; want of caution.

November 28. J. Hough, laborer, Escanaba, handling barrel cylinder; want of caution.

November 30. D. Valentine, brakeman, Menominee River Junction, coupling; want of caution.

December 7. O. Raymond, laborer, Escanaba, loading rails; want of caution.

December 9. Geo. Cornell, brakeman, Peshtigo, coupling; want of caution.

December 19. W. C. Wire, chainman, Section 18, sharpening stake; want of caution.

December 23. Pat Webb, laborer, Daggett, thrown from hand car; accidental.

December 23. M. Huel, laborer, Daggett, thrown from hand car; accidental.

December 24. P. Robarge, carpenter, Escanaba, handling timber; want of caution.

TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | Killed. | | | Injured. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | 1 | | | 8 | |
| Derailments | | 1 | | | | |
| Falling from trains | | 3 | | | 5 | |
| Frogs | | | | | | |
| Getting on and off trains | | | 1 | | 4 | 1 |
| Highway crossings | | | | | | |
| Miscellaneous | | 1 | | | 15 | 2 |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | 6 | | | |
| Total | | 6 | 7 | | 32 | 3 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | |
| Same in Michigan, | 13 |
| Number of persons injured during the year on the entire line, | |
| Same in Michigan, | 35 |
| Number of casualties purely accidental in Michigan, | 5 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 43 |
| Persons killed or injured in Michigan while intoxicated, | 5 |
| Trespassers and tramps killed or injured in Michigan, | 5 |
| Suicides in Michigan, | |

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss.

Albert Keep, President, and J. B. Redfield, Auditor, of the Chicago & Northwestern Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, ALBERT KEEP,
J. B. REDFILD,

Subscribed and sworn to before me, this 24th day of February, A. D. 1882.
[L. S.] A. W. HARD,
*Notary Public.*

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## SUPPLEMENTAL REPORT.

STATEMENT OF MILEAGE AND GROSS EARNINGS FOR THE YEAR 1881 FOR THAT PORTION OF THE SYSTEM WHICH, PRIOR TO 1881, WAS REPORTED TO THE COMMISSIONER OF RAILROADS AS THE CHICAGO & NORTHWESTERN RAILWAY.

| | | Miles. | 100ths. |
|---|---|---|---|
| The Chicago & Northwestern Railway Company, | Proper, | 1,037 | 73 |
| Elgin & State Line R. R., Illinois and Wisconsin, | Proprietary, | 47 | 44 |
| Rock River Railway, Wisconsin, | " | 6 | 10 |
| Stanwood & Tipton, Iowa, | " | 8 | 50 |
| Chicago & Milwaukee, Illinois and Wisconsin, | " | 85 | 00 |
| Chicago, Iowa & Nebraska, Iowa, | Leased, | 82 | 40 |
| Cedar Rapids & Council Bluffs, Iowa, | " | 274 | 20 |
| Maple River, Iowa, | " | 72 | 91 |
| Des Moines & Minneapolis, Iowa, | " | 58 | 00 |
| Total, | | 1,672 | 28 |

Length in Michigan, . . . . . (miles) 172 45
Gross earnings on above for 1881, . . . . . $19,021,274 38
Gross earnings per mile, . . . . . $11,374 46

The lines described above, with the Menominee River R. R. which is reported separately, make up the road which, in years prior to 1881, were reported to the Commissioner of Railroads as the Chicago & Northwestern Railway.

*Miles of Roads Chartered as, or Absolutely Consolidated with, Chicago & Northwestern Railway Company, in Operation December 31st, 1881.*

| FROM. | TO. | Total Miles. | In Illinois. | In Wisconsin. | In Michigan. |
|---|---|---|---|---|---|
| Chicago | Ishpeming, and branches to mines | 467.73 | 70.80 | 224.48 | 172.45 |
| West Chicago Shops | Montrose | 5.20 | 5.20 | ..... | ..... |
| Kenosha | Rockford | 72.10 | 44.60 | 27.50 | ..... |
| Chicago | Mississippi River | 137.00 | 137.00 | ..... | ..... |
| Chicago | Freeport | 121.00 | 121.00 | ..... | ..... |
| Geneva | Batavia | 3.20 | 3.20 | ..... | ..... |
| South Branch Junction | River | 4.50 | 4.50 | ..... | ..... |
| Belvidere | Winona | 227.00 | 20.10 | 206.90 | ..... |
| Totals | | 1,037.73 | 406.40 | 458.88 | 172.45 |

*Lines of Railroad included in the Report made by the C. & N. W. Railway Company to the Railroad Commissioner of the State of Michigan, for the Year 1881, but not included in such Reports Made for the Year 1880.*

| DIVISIONS. | Miles. | Illinois. | Wisconsin. | Michigan. | Iowa. | Minnesota. | Dakota. |
|---|---|---|---|---|---|---|---|
| Wisconsin Division— | | | | | | | |
| Sheboygan to Princeton | 78.40 | ..... | 78.40 | ..... | ..... | ..... | ..... |
| N. W. U. Division— | | | | | | | |
| Milwaukee to Fondulac | 62.63 | ..... | 62.63 | ..... | ..... | ..... | ..... |
| Iowa Railway Coal & M. Division— | | | | | | | |
| Boone to Coal Banks | 3.25 | ..... | ..... | ..... | 3.25 | ..... | ..... |
| T. & N. W. Division—all | 280.08 | ..... | ..... | ..... | 280.08 | ..... | ..... |
| Iowa Midland Division—all | 70.97 | ..... | ..... | ..... | 70.97 | ..... | ..... |
| Madison Division— | | | | | | | |
| Galena to Woodman | 76.84 | 10.25 | 66.59 | ..... | ..... | ..... | ..... |
| Lancaster Junction to Lancaster | 12.04 | ..... | 12.04 | ..... | ..... | ..... | ..... |
| Platteville Juncti'n to Platteville | 4.00 | ..... | 4.00 | ..... | ..... | ..... | ..... |
| Milwaukee to Montfort | 141.33 | ..... | 141.33 | ..... | ..... | ..... | ..... |
| Peninsular Division— | | | | | | | |
| *Florence—north | 9.71 | ..... | ..... | 9.71 | ..... | ..... | ..... |
| *Deerfield to Northfield | 5.20 | ..... | ..... | 5.20 | ..... | ..... | ..... |
| W. & St. Peter Division—all | 452.50 | ..... | ..... | ..... | ..... | 414.00 | 38.50 |
| Dakota Division—all | 296.59 | ..... | ..... | ..... | ..... | ..... | 296.59 |
| Total | 1,493.54 | 10.25 | 364.99 | 14.91 | 354.30 | 414.00 | 335.09 |

* Not operated.

| | |
|---|---|
| Total miles reported to State of Michigan for 1880, was . . | 1,720.94 |
| Increase in length of same lines has been (on Men. River R. R.), | 3.99 |
| | 1,724.93 |
| Add: Lines not reported for 1880, . . . . . | 1,493.54 |
| Reported for 1881, . . . . . | 3,218.47 |

CHICAGO & NORTHWESTERN RAILWAY CO.,
*Auditor's Office, Chicago, July 13, 1882.*

J. B. REDFIELD, *Auditor.*

# ANNUAL REPORT

OF THE

# MENOMINEE RIVER RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

The stock of the Menominee River Railroad is all owned by the Chicago & Northwestern Railroad Company, by which corporation it is operated. The capital stock paid in, the funded debt, cost, miles of road, and everything pertaining to its operation, are included in the combined accounts of, and form a part of the annual report of the Chicago & Northwestern Railroad Company, to the Railroad Commissioner of Michigan.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* ALBERT KEEP, Chicago, Ills.
*Vice President,* M. L. SYKES, New York, N. Y.
*Secretary,* J. B. REDFIELD, Chicago, Ill.
*Treasurer,* M. M. KIRKMAN, Chicago, Ill.
*General Manager,* MARVIN HUGHITT, Chicago, Ill.
*General Superintendent,* J. D. LAYING, Chicago, Ill.
*Division Superintendent,* WM. B. LINSLEY, Escanaba, Mich.
*Chief Engineer,* E. H. JOHNSON, Chicago, Ill.
*Superintendent of Telegraph,* G. H. THAYER, Chicago, Ill.
*Auditor,* J. B. REDFIELD, Chicago, Ill.
*General Passenger Agent,* W. H. STENNETT, Chicago, Ill.
*General Freight Agent,* C. G. EDDY, Chicago, Ill.
*Attorney,* B. C. COOK, Chicago, Ill.

## DIRECTORS.

ALBERT KEEP, Chicago, Ill.
M. HUGHITT, Chicago, Ill.
M. L. SYKES, New York, N. Y.
M. M. KIRKMAN, Chicago, Ill.
J. B. REDFIELD, Chicago, Ill.

Term expires June 1st, 1882.

## STOCKHOLDERS, STOCKS, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 6 |
| Number of stockholders in Michigan at same date, | None. |
| Amount of full-paid stock held in Michigan at same date, | Nothing. |

Date of annual meeting of stockholders,—first Thursday in June.
Fiscal year of company ends, December 31st.
General offices of the company are located at Chicago, Ill.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $476,594 34 |
| Total expense, including taxes, | $212,938 05 | |
| Net income, | | $263,656 29 |
| Balance for the year, | | 263,656 29 |
| Items not included in above, as follows: | | |
| Carried to accounts of the Chicago & Northwestern R. R. Co., | 263,656 29 | |
| | $263,656 29 | $263,656 29 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $665,000 00 |
| Par value of shares, $100.00 | | |
| Amount issued, $216,000, No. of shares, 2,160 | | |
| Amount paid in on common, | $216,000 00 | |
| Total amount paid in as per books of the Company, | | 216,000 00 |
| Amount paid in per mile of road owned by company, 62.36 miles, | | 3,463 75 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $41,128 14 | |
| From through passengers, | | |
| From express and baggage, | 6,394 16 | |
| From mails, | 7,198 80 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $54,721 10 |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, - - - - - | $418,789 00 | |
| From through traffic, - - - - - | | |
| From other sources, freight department, - | | |
| Total earnings, freight department, - - - - | | $418,789 00 |
| Total transportation earnings, - - - - - | | $473,510 10 |
| Earnings per mile of road operated [52.65 average miles], - - - - - - | $8,993 54 | |
| Proportion of earnings for Michigan, - - | 355,132 58 | |
| Income from all other sources: | | |
| Miscellaneous earnings, - - - - - - - - | | 3,084 24 |
| Total income from all sources, - - - - - | | $476,594 34 |
| Proportion of income for Michigan, - - | $357,445 76 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, - - - - - - - | $25,208 77 |
| Renewal of rails, - - - - - - - - - | 95,778 92 |
| Renewal of ties, - - - - - - - - - | 5,484 93 |
| Repairs of bridges, including culverts and cattle guards, - | 8,753 99 |
| Repairs of fences, road-crossings, and signs, - - - - | 1,929 95 |
| Repairs of buildings, - - - - - - - - - | 7,713 58 |
| Total, - - - - - - - - - - | $58,670 14 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, - - - - - - - - | $13,394 78 |
| Repairs of passenger cars, - - - - - - - - | 4,047 77 |
| Repairs of freight cars, - - - - - - - - | 11,737 43 |
| Total, - - - - - - - - - - | $29,179 98 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, - - - - - - - - - | $25,259 11 |
| Water-supply, - - - - - - - - - - | 1,372 43 |
| Oil and waste, - - - - - - - - - - | 2,967 09 |
| Locomotive service, - - - - - - - - - | 21,085 49 |
| Passenger train service, - - - - - - - - | 3,498 17 |
| Passenger train supplies, - - - - - - - - | 954 11 |
| Mileage of passenger cars (debit balance), - - - - | 86 00 |
| Freight train service, - - - - - - - - - | 9,643 64 |
| Freight train supplies, - - - - - - - - | 1,027 41 |
| Mileage of freight cars (debit balance), - - - - | 1,066 61 |

| | | |
|---|---|---|
| Telegraph expenses (maintenance and operating), | | $2,296 83 |
| Damage and loss of freight and baggage, | | 812 97 |
| Damages to property and cattle, | | 775 54 |
| Personal injuries, | | 2,006 52 |
| Agents and station service, | | 33,376 52 |
| Station supplies, | | 1,094 48 |
| Total, | | $107,322 92 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $969 74 |
| Salaries of clerks in general offices, | | 1,455 12 |
| Law expenses, | | 466 98 |
| Insurance, | | 29 00 |
| Stationery and printing, | | 1,477 21 |
| Outside agencies and advertising, | | 2,541 08 |
| Contingencies, | | 2,204 33 |
| Taxes in Michigan, | $1,000 79 | |
| Taxes in other States, | 7,620 76 | |
| | | 8,621 55 |
| Total, | | $17,765 01 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $58,670 14 |
| Maintenance of motive power and cars, | 29,179 98 |
| Conducting transportation, | 107,322 92 |
| General expenses, including taxes, | 17,765 01 |
| Total operating expenses and taxes, | $212,938 05 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $4,044 41 | |
| Proportion of operating expenses and taxes for Michigan, | | $181,875 11 |
| Per centage of expenses to earnings, | 44.73 | |
| Net earnings per mile of road, | $4,949 13 | |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Menominee River Junction to Quinnesec, 1877.
From Quinnesec to Menominee River, 1880.
From Menominee River to Florence, 1880.
From Florence north 9.71. Not yet opened for business.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 44 97 | |
| Length completed in Wisconsin, | 17 36 | |
| Total length completed, | | 62 36 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Total length of road belonging to this company, | | 62 36 |
| Total length of road belonging to this company in Michigan, | 44 97 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 62 36 |
| Same in Michigan, | 44 97 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 50 @ 60 lbs., | 37 36 | |
| Total length of tracks laid with iron rails, weight per yard, 50 @ 60 lbs., | 25 00 | |

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss.

Marvin Hughitt, General Manager, and J. B. Redfield, Secretary of the Menominee River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed,) MARVIN HUGHITT,
J. B. REDFIELD.

Subscribed and sworn to before me, this 16th day of June, A. D. 1882.
(L. S.) EDWARD D. NORTHAM,
*Notary Public.*

# ANNUAL REPORT

OF THE

# ESCANABA & LAKE SUPERIOR RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

The Escanaba & Lake Superior Railway is the property of the Chicago & Northwestern Railway Company, and its capital stock paid in, funded debt, cost, miles of road, are included in the annual report of the latter corporation to the Railroad Commissioner of Michigan for the year 1881. No part of the road was operated during 1881.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ALBERT KEEP, Chicago, Ill.
*Vice President*. M. HUGHITT, Chicago, Ill.
*Secretary*, J. B. REDFIELD, Chicago, Ill.
*Treasurer*, M. M. KIRKMAN, Chicago, Ill.

## DIRECTORS.

ALBERT KEEP, Chicago, Ill.
M. HUGHITT, Chicago, Ill.
B. C. COOK, Chicago, Ill,
M. M. KIRKMAN, Chicago, Ill.
J. B. REDFIELD, Chicago, Ill.
J. H. HOWE, Kenosha, Wis.
C. C. WHEELER, Chicago, Ill.

Term expires June 1, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 7 |
| Number of stockholders in Michigan at same date, - - | None. |

Amount of full-paid stock held in Michigan at same date, . Nothing.
Date of annual meeting of stockholders,—First Thursday in June.
Fiscal year of company ends May 31st.
General offices of the company are located at Chicago, Ill.

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## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Capital stock authorized by charter or articles of association, . | | $2,000,000 00 |
| Par value of shares, . . . . . | $100 00 | |
| Capital stock issued [number of shares 1,250] amount paid in, | | 125,000 00 |
| Capital stock paid in, common, . . . | $125,000 00 | |
| Capital stock, total amount paid in as per books of the Company, . . . . . | | 125,000 00 |
| Capital stock paid in per mile of road owned by company [250 miles], . . . . . | | 500 00 |

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss.

Albert Keep, President, and J. B. Redfield, Secretary, of the Escanaba & Lake Superior Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, ALBERT KEEP,
J. B. REDFIELD,

Subscribed and sworn to before me, this 27th day of April, A. D. 1882.
[L. S.] EDWARD D. NORTHAM,
*Notary Public.*

# ANNUAL REPORT

OF THE

# CHICAGO, SAGINAW & CANADA RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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[OPERATED BY JOHN A. ELWELL, LESSEE UNDER LEASE FROM D. D. ERWIN, RECEIVER OF THE UNITED STATES CIRCUIT COURT FOR THE WESTERN DISTRICT OF MICHIGAN.]

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* GENERAL D. E. SICKLES, New York.
*Secretary,* JOEL B. ERHARDT, New York.
*Treasurer,* WM. J. KELLY, Philadelphia.
*General Manager,* JNO. A. ELWELL, St. Louis, Mich.
*Superintendent,* JAS. T. HALL, St. Louis, Mich.
*General Passenger Agent,* B. F. McREYNOLDS, St. Louis, Mich.
*General Freight Agent,* H. T. LABAR, St. Louis, Mich.
*Attorney,* F. A. NIMS, Muskegon.
*Receiver,* DAVID D. ERWIN, Muskegon.

## DIRECTORS.

DANIEL E. SICKLES, New York.
WM. BOND, New York.
JOEL B. ERHARDT, New York.
GEO. W. REED, Philadelphia.
J. FRANK BOWER, Philadelphia.
JOHN O'BYRNE, Philadelphia.
WM. J. KELLY, Philadelphia.
RICHARD PENISTAN, Philadelphia.
F. A. NIMS, Muskegon.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, . . . | 8 |
| Number of stockholders in Michigan at same date, . . . | 1 |

Amount of full paid stock held in Michigan at same date, -
Date of of annual meeting of stockholders, - - - -
Fiscal year of company ends, —— ——.
General offices of the company are located at St. Louis, Mich.

## GENERAL EXHIBIT.*

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, - - - - - - - - - - | | $101,464 71 |
| Total expense, including taxes, - - - | $49,974 75 | |
| Net income, - - - - - - - - | | $51,489 96 |
| Balance for the year, - - - - | $51,489 96 | |
| Items not included in above as follows: | | |
| This amount paid the receiver D. D. Erwin, on account of rental, - - - - | 18,000 00 | |
| Balance forward to next year, - - - | 33,489 96 | |
| | $51,489 96 | $51,489 96 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, - | | $4,000,000 00 |
| Par value of shares, - - - - - - - | $100 00 | |
| Amount issued, $286,000.00, number of shares 2,860 | | |
| Amount paid in on common, - - - | $286,000 00 | |
| Total amount paid in as per books of the company, - - | | 286,000 00 |
| Amount paid in per mile of road owned by company, | 7,526 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due 1903, interest 7 per cent, payable May and November), - - - - - - - - | | $195,000 00 |
| Total amount of funded debt, - - - - - - | | $195,000 00 |

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for construction, - - - - | $440,000 00 | |
| Incurred in any other manner and how: | | |
| Operating expenses and salaries, balance of 1876, | 20,000 00 | $460,000 00 |
| Total debt liabilities, - - - - - - - - | | $655,000 00 |

*The Lessee having no definite data from which to make up report of interest on funded debt, rentals, balances, etc., etc., hence the omission thereof.

| | |
|---|---|
| Amount of debt liabilities per mile of road [38 miles], | $17,236 84 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | $655,000 00 |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not Reported Separately), Built by Company.*

| | |
|---|---|
| Grading and masonry, | $222,000 00 |
| Bridging, | 60,000 00 |
| Superstructure, including rails, | 278,000 00 |
| Land, land damages, and fences, | 12,330 00 |
| Passenger and freight stations, wood-sheds and water-stations, | 18,000 00 |
| Engine-houses, car-sheds, and turn-tables, | 3,500 00 |
| Interest paid during construction, discount, etc., | 15,000 00 |
| Engineering, agencies, salaries, and other expenses during construction, | 28,000 00 |
| Total expended for construction, | $636,830 00 |
| Average cost of construction per mile of road (not including sidings), [38 miles], | 16,758 68 |
| Proportion of cost of construction for Michigan, | 636,830 00 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | 10,500 00 |
| Passenger, mail, and baggage cars, | 7,000 00 |
| Freight and other cars, | 12,500 00 |
| Machinery and tools, | 1,000 00 |
| Total for equipment, | $31,000 00 |
| Average cost of equipment per mile of road operated by company, [38 miles], | 815 79 |
| Proportion of cost of equipment for Michigan, | 31,000 00 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $667,830 00 |
| Average cost of same per mile, | 17,574 47 |
| Proportion of cost of road and equipment for Michigan, | 667,830 00 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension or alteration of road, side tracks built during the year, | 2,000 60 |
| Branches, extension or alteration of road, specifying each: | |
| Extension of main track one mile along the river front at St. Louis, Michigan, with sidings at Holcomb's Salt Block, | 6,000 00 |

| | |
|---|---|
| Land, | $3,000 00 |
| New locomotives, | 10,500 00 |
| New passenger cars, | 6,000 00 |
| New mail and baggage cars, | 1,000 00 |
| New freight cars, | 12,500 00 |
| Machine-shops, machinery and tools, | 1,000 00 |
| New fences, | 5,830 00 |
| Total charges to property account during the year, | $47,830 00 |
| Net addition to property account for the year, | 47,830 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $29,919 56 | |
| From through passengers, | 3,447 72 | |
| From express and baggage, | 838 51 | |
| From mails, | 1,725 24 | |
| Total earnings, passenger department, | | $35,931 03 |
| Earnings per train mile run [43,632 miles], | $0.82.3 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $18,404 84 | |
| From through traffic, | 37,138 15 | |
| From other sources, freight department, | 9,095 02 | |
| Total earnings, freight department, | | $64,638 01 |
| Earnings per train mile run [23,475 miles], | $2 75.03 | |
| Total transportation earnings, | | $100,569 04 |
| Earnings per mile of road operated [38 miles], | $2,670 12 | |
| Earnings per train mile run, from all trains earning revenue [67,107 miles], | $1 51.05 | |
| Proportion of earnings for Michigan, | $100,569 04 | |
| Income from all other sources: | | |
| Telegraph Line, | 444 62 | |
| Car mileage, | 451 05 | 895 67 |
| Total income from all sources, | | $101,464 71 |
| Proportion of income for Michigan, | $101,464 71 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $13,154 45 |
| Renewal of rails, | 875 83 |
| Renewal of ties, | 3,094 66 |
| Repairs of bridges, including culverts and cattle guards, | 162 13 |
| Repairs of fences, road-crossings, and signs, | 100 60 |
| Repairs of buildings, | 1,000 94 |
| Total, | $18,388 61 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $2,840 01 |
| Repairs of passenger cars, | 193 80 |
| Repairs of freight cars, | 610 70 |
| Total, | $3,644 51 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $2,291 85 |
| Water-supply, | 825 00 |
| Oil and waste, | 439 86 |
| Locomotive service, | 3,856 01 |
| Passenger train service, | 1,419 89 |
| Passenger train supplies, | 175 00 |
| Mileage of passenger cars (debit balance), | 70 00 |
| Freight train service, | 1,627 44 |
| Freight train supplies, | 256 50 |
| Mileage of freight cars (debit balance), | 6,302 85 |
| Damage and loss of freight and baggage, | 89 44 |
| Damages to property and cattle, | 152 00 |
| Personal injuries, | 85 39 |
| Agents and station service, | 2,437 64 |
| Station supplies, | 168 50 |
| Total, | $20,197 37 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $2,400 00 |
| Salaries of clerks in general offices, | 1,820 00 |
| Law expenses, | 588 10 |
| Insurance, | 309 40 |
| Stationery and printing, | 490 14 |
| Taxes in Michigan, | 2,135 82 |
| Total, | $7,744 26 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | $18,388 61 | |
| Maintenance of motive power and cars, | 3,644 51 | |
| Conducting transportation, | 20,197 37 | |
| General expenses, including taxes, | 7,744 26 | |
| Total operating expenses and taxes, | | $49,974 75 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $1,315 12 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [67,107 miles], | $0 74.47 | |
| Proportion of operating expenses and taxes for Michigan, | $49,974 75 | |
| Per centage of expenses to earnings, | 49.69 | |
| Net earnings per mile of road, | 1,355 00 | |
| Net earnings per train mile, | $0 76.58 | |

ASSETS AND LIABILITIES.

The Lessee has no data from which a correct statement can be made of assets and liabilities of the company, and therefore makes no report in this particular.

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From St. Louis to Riverdale, August 15th, 1875.
From St. Louis to Cedar Lake, December 1st, 1875.
From St. Louis to Edmore, October, 1st, 1878.
From St. Louis to Lakeview, August 1st, 1879.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths |
|---|---|---|
| Length completed in Michigan, | | 38 00 |
| Total length completed, from St. Louis to Lakeview, | | 38 00 |
| Total length of road belonging to this company, | | 38 00 |
| Total length of road belonging to this company in Michigan, | 38 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 3 29 |
| Same in Michigan, | 3 29 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 41 29 |
| Same in Michigan, | 41 29 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with iron rails, weight per yard, 50 and 60 lbs., | | 41 29 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 8; aggregate length, feet, | | 800 |
| Total, | 8 | 800 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality? Detroit, Lansing & Northern R. R., at Edmore.

What railroads cross your road either over or under your grade in this State, and where? None.

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 13 |
| Same in Michigan, | 13 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 65 |
| Same in Michigan, | 65 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 26 |
| What is the average cost per rod? | $0 85 | |
| The total cost of same? | $4,352 00 | |
| How many miles of new fencing have you built during the year? | | 14 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | |
| In Montcalm county, | | 16 |
| Total miles, | | 16 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 6 |
| Average length of sections, | 6 miles. |
| Average number of men in each section gang, | 5 |
| Number of new ties put in whole line during the year, | 10,000 |
| Number of new ties put in track in Michigan, | 10,000 |
| Average number of new ties per mile of road, | 263 |

Between what points were new rails laid:
Cedar Lake and Edmore.

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 2 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 2 |
| Number of passenger cars—8-wheel, | 3 |
| Number express and baggage cars, | 1 |
| Number of box freight cars, | 3 |
| Number of platform cars, | 42 |
| Number of conductors' way cars, | 1 |
| Number of locomotives equipped with train-brake, | 1 |
| Number of cars used in passenger trains equipped with train-brake, | 4 |
| What kind of train-brake is in use on your road? | Westinghouse. |
| Number of passenger train cars with Miller platform and buffer, | 2 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 43,632 |
| Miles run by freight trains during the year, | 23,475 |
| Total mileage of trains earning revenue, | 67,107 |
| Miles run by work trains during the year, | 5,600 |
| Total train mileage, | 72,707 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3 |
| Average number of cars in freight trains, | 15 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 5,624 | | |
| Number of local passengers carried, | 77,699 | | |
| Total number of passengers carried, | 83,323 | | |
| Total passenger mileage, or passengers carried one mile, | | 1,047,828 | |
| Average distance traveled by each passenger, | | 12.57 | |
| Average amount received from each passenger, | | | $0.40.23 |
| Highest rate of fare per mile, for any distance, | | | 0.05.00 |
| Lowest rate of fare per mile, for any distance, | | | 0.01.50 |
| Average rate of fare per mile, for all passengers, | | | 0.03.40 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | 42,623 | | |
| Number of tons of local freight carried, | 26,403 | | |
| Total tons of freight carried, | 69,036 | | |
| Total freight mileage, or tons carried one mile, | 1,139,157 | | |
| Average ton haul for all freight, | | 16.50 | |
| Average amount received for each ton haul, | | | $0.93.62 |
| Average rate per ton per mile, received for all freight, | | | 0.05.64 |

*Tonnage of Articles Transported.*

| | Tons. | Per Cent. |
|---|---|---|
| Grain, | 3,449 | 4.99 |
| Flour, | 51 | .07 |
| Other agricultural products, | 132 | 16 |
| Lumber and forest products, | 59,857 | 86.90 |
| Coal, | 127 | .14 |
| Plaster, | 108 | .13 |
| Salt, | 263 | .32 |
| Railroad iron,—iron and steel rails, | 105 | .13 |
| Merchandise and other articles not enumerated above, | 4,941 | 7.16 |
| Total tons carried, | 69,036 | 100. |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company; they pay one and one-half first-class rates, and their freight is taken at trains.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

None.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

United States Rolling Stock Co., New York City, $5,640 00

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

None.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$1,960.32 per annum.

*Telegraph.*

Number of miles of telegraph owned by company, - - - 38

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

None.

SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, - | None. |
| Number of persons injured during the year on the entire line, | None. |

STATE OF MICHIGAN, }
COUNTY OF GRATIOT, } ss.

Jno. A. Elwell, Lessee, and General Manager of the Chicago, Saginaw & Canada Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), JNO. A. ELWELL,
*Lessee and General Manager.*

Subscribed and sworn to before me, this 13th day of April, A. D. 1882.

[L. S.] T. W. WHITNEY,
*Notary Public.*

# ANNUAL REPORT

OF THE

# CHICAGO & WEST MICHIGAN RAILROAD COMPANY,

*For the Period Commencing January 1st, and ending September 30, 1881.*

---

## GENERAL REMARKS.

This road was operated under its original corporate organization, until the 1st day of October, 1881, when it consolidated with other companies to form the Chicago and West Michigan *Railway* corporation.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* NATHANIEL THAYER, JR., Boston, Mass.
*Vice President,* GEORGE C. KIMBALL, Muskegon, Mich.
*Secretary and Treasurer,* CHARLES MERRIAM, Boston Mass.
*General Manager,* GEORGE C. KIMBALL, Muskegon, Mich.
*Auditor,* HUGH PARK, Muskegon, Mich.
*General Passenger and Freight Agent,* A. M. NICHOLS, Grand Rapids, Mich.
*Attorney,* F. A. NIMS, Muskegon, Mich.

## DIRECTORS.

N. THAYER, Boston, Mass.
H. H. HUNNEWELL, Boston, Mass.
GEORGE O. SHATTUCK, Boston, Mass.
CHAS. F. ADAMS, JR., Boston, Mass.
FRANK SHAW, Boston, Mass.
ALPHEUS HARDY, Boston, Mass.
N. THAYER, JR., Boston, Mass.
CHAS. MERRIAM, Bosston, Mass.
GEORGE C. KIMBALL, Muskegon, Mich.

Term expires April 19, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 404 |
| Number of stockholders in Michigan at same date, - - | 1 |

Amount of full-paid stock held in Michigan at same date, . $10,000 00
Date of annual meeting of stockholders,—April 19th.
Fiscal year of company ends December 31st.
General offices of the company are located at Muskegon, Mich., and Boston, Mass.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $774,282 48 |
| Total expense, including taxes, | $603,914 66 | |
| Net income, | | $170,367 82 |
| Interest on unfunded debt, | 31,039 18 | |
| Balance applicable to dividends, | | $139,328 64 |
| Dividends declared ($2.50 per share) on 16,429 shares, | 153,572 50 | |
| Balance for the year, 1881, | $14,243 86 | |
| Balance (profit and loss) last year, 1880, | | 281,564 84 |
| Items not included in above, as follows: | | |
| Losses written off, | 127,992 34 | |
| Balance forward to C. & W. M. R'y Co., | 139,328 64 | |
| | $281,564 84 | $281,564 84 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $6,151,000 00 |
| Par value of shares, | $100.00 | |
| Average price received per share, | $100.00 | |
| Amount issued, $6,151,000, No. of shares, 61,510 | | |
| Amount paid in on common, | $6,151,000 00 | |
| Total amount paid in as per books of the company, | | 6,151,000 00 |
| Amount realized in cash, | $6,151,000 00 | |
| Amount paid in per mile of road owned by company, | | 23,486 06 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due C. & M. L. S. R. R. Co., due 1889, interest 8 per cent, payable March and September), | | $480,000 00 |
| Total amount of funded debt, | | $480,000 00 |
| Amount received from the same in property, | $480,000 00 | |

FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for equipment, | 66,600 00 | |
| Other debts,—current credit balances, etc., | $607,942 81 | $673,942 81 |
| Total debt liabilities, | | $1,153,942 81 |
| Amount of debt liabilities per mile of road [261.9 miles], | | $4,406 93 |

COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Total expended for construction, | $6,261,154 21 |
| Average cost of construction per mile of road (not including sidings), [2,619 miles], | 23,906 66 |
| Proportion of cost of construction for Michigan, | All. |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | 176,867 37 |
| Snow-plows on wheels, | 5,000 00 |
| Passenger, mail, and baggage cars, | 51,210 60 |
| Freight and other cars, | 265,432 00 |
| Machinery and tools, | 42,777 79 |
| Total for equipment, | $541,287 76 |
| Average cost of equipment per mile of road operated by company [261.9 miles]. | 2,028 20 |
| Proportion of cost of equipment for Michigan, | All. |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $6,802,441 97 |
| Average cost of same per mile (261.9 miles), | 25,973 39 |
| Proportion of cost of road and equipment for Michigan, | All. |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| New locomotives, | $16,964 70 |
| New freight cars, | 16,400 00 |
| Any other expenditures charged to property account (specifying same): | |
| Steam excavator, | 7,080 00 |
| Total charges to property account during the year, | $40,444 70 |
| Net addition to property account for the year, | $40,444 70 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $129,876 40 | |
| From through passengers, | 95,374 78 | |
| From mails, | 12,700 94 | |
| From other sources, passenger department, | 14,455 98 | |
| Total earnings, passenger department, | | $252,408 10 |
| Earnings per train mile run [352,118 miles], | $0.71.6 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $234,710 30 | |
| From through traffic, | 287,164 08 | |
| Total earnings, freight department, | | $521,874 38 |
| Earnings per train mile run [340,804 miles], | $1.53.1 | |
| Total transportation earnings, | | $774,282 48 |
| Earnings per mile of road operated [261.9 miles], | $2,956 41 | |
| Earnings per train mile run, from all trains earning revenue [692,922 miles], | $1.11.7 | |
| Proportion of earnings for Michigan, | 774,282 48 | |
| Total income from all sources, | | $774,282 48 |
| Proportion of income for Michigan, | | 774,282 48 |

### EXPENSES.

#### CLSS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $86,868 26 |
| Renewal of rails, | 77,438 93 |
| Renewal of ties, | 13,654 55 |
| Repairs of bridges, including culverts and cattle guards, | 28,136 96 |
| Repairs of fences, road crossings, and signs, | 5,009 18 |
| Repairs of buildings, | 18,772 88 |
| Total, | $229,880 76 |

#### CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $31,540 27 |
| Repairs of passenger cars, | 23,593 52 |
| Repairs of freight cars, | 26,436 55 |
| Total, | $81,570 34 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $64,633 93 |
| Water-supply, | 6,911 31 |
| Oil and waste, | 7,186 19 |
| Locomotive service, | 42,754 52 |
| Passenger train service, | 18,376 17 |
| Passenger and freight train supplies, | 666 69 |
| Mileage of passenger cars (debit balance), | 3,024 50 |
| Freight train service, | 17,790 28 |
| Freight train supplies, | 664 06 |
| Mileage of freight cars (debit balance), | 3,747 65 |
| Telegraph expenses (maintenance and operating), | 8,083 28 |
| Damage and loss of freight and baggage, | 257 83 |
| Damages to property and cattle, | 1,455 88 |
| Personal injuries, | 1,861 10 |
| Agents and station service and station supplies, | 36,618 01 |
| Total, | $212,356 40 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | 12,225 00 |
| Salaries of clerks in general offices, | 15,116 76 |
| Law expenses, | 2,208 49 |
| Insurance, | 2,537 94 |
| Stationery and printing, | 5,712 72 |
| Outside agencies and advertising, | 2,191 16 |
| Contingencies, | 24,488 51 |
| Taxes in Michigan, | 15,626 88 |
| Total, | $80,107 16 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $229,880 76 |
| Maintenance of motive power and cars, | 81,570 34 |
| Conducting transportation, | 212,356 40 |
| General expenses, including taxes, | 80,107 16 |
| Total operating expenses and taxes, | $603,914 66 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, [261.9 miles], | $2,305 89 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [692,922 miles), | | $0.87.1 |
| Proportion of operating expenses and taxes for Michigan, | $603,914 66 | |
| Per centage of expenses to earnings [77.99], | | |
| Net earnings per mile of road, | $650 52 | |
| Net earnings per train mile, | | $0.24.6 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | $6,138,279 04 | |
| Equipment account, | 540,987 76 | |
| | | $6,679,266 80 |
| Cash items: | | |
| Cash, | $37,166 65 | |
| Bills receivable, | 532,371 30 | |
| Due from agents and companies, | 144,014 16 | |
| | | 713,552 11 |
| Other assets: | | |
| Materials and supplies, | $42,649 67 | |
| Debit balances, | 8,802 87 | |
| | | 51,452 54 |
| Total assets, | | $7,444,271 45 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | $6,151,000 00 | |
| Funded debt, | 480,000 00 | |
| | | $6,631,000 00 |
| Unfunded debt: | | |
| Interest unpaid, | 4,680 00 | |
| Notes payable, | 128,000 00 | |
| Vouchers and accounts, | 541,262 81 | |
| Profit and loss, or income accounts, | 139,328 64 | |
| | | 813,271 45 |
| Total liabilities, | | $7,444,271 45 |

## DESCRIPTION OF ROAD.

The description of road, with details of mileage and traffic accounts, and other statistical information, required to be reported to the Commissioner of Railroads each year, are included in the report of the new corporation, the Chicago & West Michigan Railway Company.

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 352,118 |
| Miles run by freight trains during the year, | 340,804 |
| Total mileage of trains earning revenue, | 692,922 |

STATE OF MICHIGAN, }
COUNTY OF MUSKEGON, } ss.

Geo. C. Kimball, General Manager of the Chicago & West Michigan Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, GEO. C. KIMBALL,
*General Manager.*

Subscribed and sworn to before me, this 1st day of May A. D. 1882,
[L. S.] N. WARD,
*Notary Public.*

# ANNUAL REPORT

OF THE

# CHICAGO & WEST MICHIGAN RAILWAY COMPANY,

*For the Period Commencing October 1, and Closing December 31, 1881.*

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## GENERAL REMARKS.

This corporation, formed by a consolidation of the Chicago and West Michigan Railroad, the Grand Rapids, Newaygo & Lake Shore, and the Grand Haven Railroad companies, filed its articles of association, under the consolidation, October 1, 1881. This report covers the condition and business of the new company, from that date, and the description of road, mileage and traffic details, reports of accidents, and other statistical information for the several roads forming the consolidated corporation for the entire year, 1881.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, N. THAYER, JR., Boston, Mass.
*Vice President*, GEO. C. KIMBALL, Muskegon, Mich.
*Secretary*, CHAS. MERRIAM, Boston, Mass.
*Treasurer*, CHAS. MERRIAM, Boston, Mass.
*General Manager*, GEO. C. KIMBALL, Muskegon, Mich.
*Division Superintendents*, { E. W. BLISS, Holland, Mich. / GEO. McNUTT, Muskegon, Mich.
*Superintendent of Telegraph*, F. O. NYE, Holland, Mich.
*Auditor*, H. PARK, Muskegon, Mich.
*General Passenger Agent*, A. M. NICHOLS, Grand Rapids.
*General Freight Agent*, A, M. NICHOLS, Grand Rapids.
*Attorney*, F. A. NIMS, Muskegon, Mich.

## DIRECTORS.

N. THAYER, Boston, Mass.
H. H. HUNNEWELL, Boston, Mass.
GEO. O. SHATTUCK, Boston, Mass.
CHAS. F. ADAMS, JR., Boston, Mass.
FRANK SHAW, Boston, Mass.
ALPHEUS HARDY, Boston, Mass.
N. THAYER, JR., Boston, Mass.
CHAS. MERRIAM, Boston, Mass.
GEO C. KIMBALL, Muskegon, Mich.

Term expires April 19, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 404 |
| Number of stockholders in Michigan at same date, | 1 |
| Amount of full-paid stock held in Michigan at same date, | $10,000 00 |

Date of annual meeting of stockholders,—April 19th.
Fiscal year of company ends, December 31st.
General offices of the company are located at Muskegon, Mich., and Boston, Mass.

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## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $363,154 81 |
| Total expense, including taxes, | $313,132 54 | |
| Net income, | | $50,022 27 |
| Interest on funded debt, | 48,157 11 | |
| Balance applicable to dividends, | | $1,865 16 |
| Balance for the year, | | $1,865 16 |
| Balance brought forward from the accounts of the Chicago & West Michigan Railroad, the Grand Rapids, Newaygo & Michigan Lake Shore and Grand Haven Railroad Companies, | | 152,776 14 |
| Balance forward to next year, | 154,641 30 | |
| | $154,641 30 | $154,641 30 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $6,796,833 33 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $6,796,833.33, No. of shares, | 67,968⅓ | | |
| Amount paid in on common, | | $6,796,833 33 | |
| Total amount paid in as per books of the company, | | | 6,796,833 33 |
| Amount realized in property, | | $6,796,833 33 | |
| Amount paid in per mile of road owned by company, | | $19,221 81 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | | |
|---|---|---|---|
| First Mortgage Bonds (due 1889, C. & M. L. S. R. R., interest 8 per cent, payable March and September), | | $480,000 00 | |
| Mortgage Bonds (due 1891, G. R. N. & L. S., interest 8 per cent, payable January and July), | | 576,000 00 | |
| Mortgage Bonds (due 1921, C. & W. M. R'y Co., interest 5 per cent, payable June and December), | | 2,001,000 00 | |
| Mortgage Bonds (due 1905, G. R. N. & L. S., Second Division, interest at 7 per cent, payable June and December), | $200,000 00 | | |
| Less am't owned and held by Co., | 169,500 00 | | |
| | | 30,500 00 | |
| Total amount of funded debt, | | | $3,087,500 00 |
| Amount received from the same in property, | | $3,087,500 00 | |

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred in any other manner and how: | | |
| Interest unpaid, | $45,340 01 | |
| Other debts,—current credit balances, etc., | 211,920 99 | |
| | | $257,261 00 |
| Total debt liabilities, | | $3,344,761 00 |
| Amount of debt liabilities per mile of road [353.6 miles], | | 9,459 17 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | 2,034,474 52 |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Total expended for construction, | $8,037,443 08 |
| Average cost of construction per mile of road (not including sidings) [353.6 miles], | 22,730 33 |
| Proportion of cost of construction for Michigan, | $8,037,443 08 |

*Cost of Equipment.*

| | |
|---|---|
| Station and office, | $5,480 00 |
| Hand and rubble cars, | 3,670 00 |
| Locomotives, | 206,864 37 |
| Snow-plows on wheels, | 5,000 00 |
| Passenger, mail, and baggage cars, | 77,210 60 |

| | |
|---|---|
| Freight and other cars, | 421,961 00 |
| Machinery and tools, | 43,310 23 |
| Total for equipment, | $763,499 20 |
| Average cost of equipment per mile of road operated by company [366.6 miles], | 2,082 65 |
| Proportion of cost of equipment for Michigan, | 763,499 20 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $8,800,942 28 |
| Average cost of same per mile, | 24,889 65 |
| Proportion of cost of road and equipment for Michigan, | 8,800,942 28 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| New freight cars, | $56,400 00 |
| Machine shops, machinery and tools, | 1,567 57 |
| Total charges to property account during the year, | $57,967 57 |
| Property sold and credited property account during year (specifying same): | |
| Tools and machinery, | 756 13 |
| Net addition to property account for the year, | $57,211 44 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $70,018 03 | |
| From through passengers, | 43,482 18 | |
| From express and baggage, | 5,812 64 | |
| From mails, | 5,373 66 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $124,686 51 |
| Earnings per train mile run [117,372 miles], | $1 06.2 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $128,471 00 | |
| From through traffic, | 109,736 14 | |
| From other sources, freight department, | Nothing. | |
| Total earnings freight department, | | $238,207 14 |
| Earnings per train mile run [101,601 miles], | $2 34.4 | |
| Total transportation earnings, | | $362,893 65 |

| | | |
|---|---|---|
| Earnings per mile of road operated [366.6 miles], | $89 89 | |
| Earnings per train mile run, from all trains earning revenue [218,973 miles], | $1 65.7 | |
| Income from all other sources: | | |
| Telegraph, | | $261 16 |
| Total income from all sources, | | $363,154 81 |
| Proportion of income for Michigan, | $363,154 81 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $48,879 72 |
| Renewal of rails, | 69,745 14 |
| Renewal of ties, | 5,623 80 |
| Repairs of bridges, including culverts and cattle guards, | 12,060 25 |
| Repairs of fences, road crossings, and signs, | 2,235 78 |
| Repairs of buildings, | 7,803 53 |
| Total, | $146,348 22 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $15,376 62 |
| Repairs of passenger cars, | 9,308 27 |
| Repairs of freight cars, | 13,580 39 |
| Total, | $38,265 28 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $29,313 25 |
| Water-supply, | 1,952 74 |
| Oil and waste, | 3,439 34 |
| Locomotive service, | 18,656 27 |
| Passenger train service, | 7,923 73 |
| Passenger train supplies, | 567 02 |
| Mileage of passenger cars (debit balance), | 724 04 |
| Freight train service, | 7,612 99 |
| Freight train supplies, | 605 57 |
| Mileage of freight cars (debit balance), | 383 26 |
| Telegraph expenses (maintenance and operating), | 3,444 19 |
| Damage and loss of freight and baggage, | 43 05 |
| Damages to property and cattle, | 709 69 |
| Personal injuries, | 228 19 |
| Agents, station service, and station supplies, | 19,763 46 |
| Total, | $95,366 79 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $4,075 00 |
| Salaries of clerks in general offices, | 4,101 46 |
| Law expenses, | 821 56 |
| Insurance, | 1,056 22 |
| Stationery and printing, | 5,329 97 |
| Outside agencies and advertising, | 861 77 |
| Contingencies, | 10,344 32 |
| Taxes in Michigan, | 7,561 95 |
| Total, | $33,152 25 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $146,348 22 |
| Maintenance of motive power and cars, | 38,265 28 |
| Conducting transportation, | 95,366 79 |
| General expenses, including taxes, | 33,152 25 |
| Total operating expenses and taxes, | $313,132 54 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, (366.6 miles), | $854 15 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [218,973 miles], | $1 43.4 | |
| Proportion of operating expenses and taxes for Michigan, | $313,132 54 | |
| Per centage of expenses to earnings, | 86.23 | |
| Net earnings per mile of road, | $135 74 | |
| Net earnings per train mile, | $0 21.8 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | $8,037,443 08 | |
| Equipment account, | 763,499 20 | |
| Other investments (specifying same): | | |
| White River R. R. Co. Stock, | 6,000 00 | |
| C. & W. M. R'y Co. Stock Scrip, | 198 80 | |
| Southern Extension, | 37,525 20 | |
| Grand Rapids Extension, | 29,408 18 | |
| Indiana Extension, | 96,712 01 | |
| North Muskegon, | 4,278 31 | |
| Fruitport Cut-off, | 11,152 28 | |
| | | $8,986,217 06 |
| Cash items: | | |
| Cash, | $15,822 03 | |
| Bills receivable, | 415,296 30 | |
| Due from agents and companies, | 117,504 08 | |
| | | 548,622 41 |

| | | | |
|---|---|---|---|
| Other assets: | | | |
| Materials and supplies, | | $116,696 66 | |
| Debit balances, | | 4,394 91 | |
| Union Trust Company, N. Y., | $24,212 50 | | |
| Chas. Merriam, Trustee, | 616,360 00 | | |
| | | 640,572 50 | |
| | | | $761,664 07 |
| Total assets, | | | $10,296,503 54 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | $6,796,833 33 | |
| Funded debt, | 3,087,500 00 | |
| | | $9,884,333 33 |
| Unfunded debt: | | |
| Interest unpaid, | $45,607 92 | |
| Vouchers and accounts, | 211,920 99 | |
| Profit and loss, or income accounts, | 154,641 30 | |
| | | 412,170 21 |
| Total liabilities, | | $10,296,503 54 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From New Buffalo to Pentwater, January 1, 1872.
From Holland to Grand Rapids, January 1, 1872.
From Allegan to Muskegon, July 1, 1870.
From Grand Rapids to White Cloud, September 24, 1875.
From Muskegon to Big Rapids, July 21, 1873.
From Mears to Hart, July 1, 1880.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 169 50 | |
| Total length completed, | | 169 50 |

BRANCHES.

| | | |
|---|---|---|
| From Holland to Grand Rapids, | 24 50 | |
| Newaygo, | 46 00 | |
| Fruitport Cut-off, | 13 50 | |
| Big Rapids, | 51 20 | |
| Hart, | 3 30 | |
| Muskegon Lake Division, | 4 70 | |
| Allegan, | 23 00 | |
| Muskegon River, | 17 00 | |
| | | 184 10 |
| Total length of branches owned by company, | | 184 10 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Total length of branches owned by company in Michigan, | 184 10 | |
| Total length of road belonging to this company, | | 353 60 |
| Total length of road belonging to this company in Michigan, | 353 60 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 63 20 |
| Same in Michigan, | 63 20 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 416 80 |
| Same in Michigan, | 416 80 | |

Gauge of track, 4 feet, 8½ inches.

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Name, description, and length of each: | | |
| White River R. R., | | 13 00 |
| Total length of above roads, | | 13 00 |
| Total length of above roads in Michigan, | 13 00 | |
| Total miles of road operated by this company, | | 366 60 |
| Total miles of road operated by this company in Michigan, | 366 60 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 218; aggregate length, feet, | 33,000 |
| Total, | 218 | 33,000 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 474 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 511 |
| Number of cattle guards renewed during the year, | 34 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
L. S. & M. S. R'y, near Grandville.
D., G. H. & M. R'y, at Grand Rapids and Grand Haven.
Grand Rapids & Indiana R. R., at Grand Rapids.
Kalamazoo & South Haven R. R., at Grand Junction.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection of gates or flagmen, | 377 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 1 |

| | |
|---|---|
| Number of crossings of highways at grade in this State without signs, | 213 |
| Number of crossings of highways over railroad, | 9 |
| Number of crossings of highways under railroad, | 11 |
| Number of highway bridges 18 feet above track, | 4 |
| Number of highway bridges less than 18 feet above track, | 5 |
| Have safety-guards been erected at over-head obstructions? | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 87 |
| Same in Michigan, | 87 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 1,505 |
| Same in Michigan, | 1,503 |

*Fencing.*

| | |
|---|---|
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Oceana county, | 29.26 |
| In Muskegon county, | 35.40 |
| In Newaygo county, | 76.00 |
| In Mecosta county, | 4.62 |
| In Allegan county, 1.18; Kent, .42; Van Buren, 2.64, | 4.24 |
| Total miles, | 149.52 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 68 |
| Average length of sections, | 5.4 miles. |
| Number of men in each section gang, | 5 |
| Number of new ties put in whole line during the year, | 149,238 |
| Number of new ties put in track in Michigan, | 149,238 |
| Average number of new ties per mile of road, | 422 |
| New rails put in track: | |
| Iron [tons 364.15] miles, | 4.63 |
| Steel [tons 3,663.44], miles, | 41.63 |
| Total miles of track laid with new rails, | 46.26 |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of trestle work replaced with earth during the year (linear feet), | 4,743 |
| Timber culverts replaced with stone—number, | 0 |

| | |
|---|---|
| Timber culverts replaced with iron pipe,—number, | 6 |
| Timber culverts replaced with sewer pipe,—number, | 14 |
| Timber culverts replaced with timber, | 61 |
| New bridges built during the year,—number, | 4 |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Muskegon | Pile | Wood | | 37 |
| Fruitport | Trestle on Piles | Wood | December | 297 |
| Fruitport | Trestle on Piles | Wood | December | 108 |
| Vriesland | Pile | Wood | August | 176 |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 23 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 13 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 7 |
| Number of passenger cars—12-wheel, | 20 |
| Number of passenger cars—8-wheel, | |
| Number of express and baggage cars, | 14 |
| Number of box freight cars, | 371 |
| Number of platform cars, | 960 |
| Number of conductors' way cars, | 7 |
| Other cars as follows: Log cars, 34; boarding car, 1; pay car, 1, | 36 |
| Number of cars used in passenger trains equipped with train-brake. | 34 |
| What kind of train-brake is in use on your road? Westinghouse and Vacuum. | |
| Number of passenger train cars with Miller platform and buffer, | 34 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 469,490 |
| Miles run by freight trains during the year, | 442,405 |
| Total mileage of trains earning revenue, | 911,895 |
| Miles run by work trains during the year, | 45,855 |
| Total train mileage, | 957,750 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 80 |
| Average number of cars in freight trains, | 20 |
| Average weight of freight trains, exclusive of freight,—tons, | 225 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 88,747 | | |
| Number of local passengers carried, | 453,233 | | |
| Total number of passengers carried, | 541,980 | | |
| Total passenger mileage, or passengers carried one mile, | | 13,970,292 | |
| Average distance traveled by each passenger, | | 25.77 | |
| Average amount received from each passenger, | | | $0.74 |
| Highest rate of fare per mile, for any distance, | | | 0.04 |
| Lowest rate of fare per mile, for any distance, | | | 0.03 |
| Average rate of fare per mile, for all passengers, | | | 0.02.9 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Total tons of freight carried, | 774,279 | | |
| Total freight mileage, or tons carried one mile, | | 43,455,419 | |
| Average ton haul for all freight, | | 56.32 | |
| Average amount received for each ton haul, | | | $1.13 |
| Average rate per ton per mile, received for all freight, | | | 0.02.02 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 31,005 | 4.04 |
| Flour, | 5,908 | .76 |
| Provisions (beef, pork, lard, etc.) | 1,875 | .24 |
| Animals, | 3,910 | .54 |
| Other agricultural products, | 23,220 | 2.99 |
| Lumber and forest products, | 494,738 | 63.81 |
| Coal, | 26,717 | 3.45 |
| Plaster, | 18,084 | 2.34 |
| Pig and bloom iron, | 29,750 | 3.85 |
| Ores, | 24,917 | 3.22 |
| Stone and brick, | 11,692 | 1.51 |
| Merchandise and other articles not enumerated above, | 102,463 | 13.25 |
| Total tons carried, | 774,279 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. They pay one and one-half first-class freight rates, and half-fare for messengers, and do a general express business. We take their freights at our depots.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

No freight or transportation companies run over this line.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Great Western Despatch, Indianapolis, Ind., | $3 63 |
| Erie & Pacific Despatch, Indianapolis, Ind., | 8 88 |
| Union Line, Pittsburg, Pa., | 33 13 |
| Merchants' Despatch Transportation Company, New York, | 199 47 |
| Empire Line, Philadelphia, Pa., | 18 69 |
| National Despatch, St. Albans, Vt., | 226 80 |
| Erie & North Shore Despatch, Detroit, Mich., | 663 28 |
| J. B. Case, Racine, Wis., | 17 |
| D. W. Parker, Kalamazoo, Mich., | 88 |
| Erie & Chicago Car Co., Detroit, Mich., | 2,444 31 |
| Phœnix Furniture Co., Grand Rapids, Mich., | 14 43 |
| M. H. Arnott & Co., Elmira, N. Y., | 1 82 |
| C. C. Comstock, Grand Rapids, Mich., | 45 16 |
| Oil Tank Company, Cleveland, O., | 12 |
| W. P. Rand & Co., Chicago, Ill., | 6 20 |
| United States Rolling Stock Company, New York City, | 1 05 |
| | $1,468 02 |

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Pullman Palace Sleeping Cars are run on night express trains. We pay three cents per mile mileage.

Their charge is $1.50 per berth.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Pullman Palace Car Co., $4,151.45.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

At the rate of $22,079.87 per annum.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

April 17. E. R. Chandler, switchman, Holland, fell under cars in motion; company not responsible.

April 19. C. Perkins, brakeman, Grandville, fell under cars in motion; company not responsible.

January 7. F. Smith, brakeman, Mt. Cloud, fell under cars in motion; company not responsible.

July 14. C. Le Rock, trespasser, Holton, lying on track, supposed to have been under influence of liquor; company not responsible.

August 8. A. Buel, laborer, N. Buffalo, fell under cars in motion; company not responsible.

August 10. Peter Nelson, trespasser, Whitehall, run over by train whilst drunk; company not responsible.

August 9. A. McGraw, trespasser, Holton, run over by train; company not responsible.

August 20. I. Howe, brakeman, Muskegon, struck by overhead bridge; company not responsible.

September 23. O. Topping, brakeman, Trent, coupling cars; company not responsible.

October 24. W. Wright, passenger, Town Line, fell between cars; company not responsible.

November 26. F. Marrew, baggageman, Allegan, killed whilst coupling cars.

December 14. E. L. Tucker, trespasser, Bangor, killed whilst walking on track; company not responsible.

December 27. W. Granger, brakeman, Fremont Center, fell under train in motion; company not responsible.

### INJURED.

February 11. J. Dowd, brakeman, Hayes, slipped on snow in making coupling, losing one finger; lack of caution.

August 1. A. Dagenoes, trespasser, Holton, run over whilst on track under influence of liquor, one leg cut off; carelessness.

August 9. I. Holden, trespasser, Bangor, sitting on end of car, got leg crushed; carelessness.

August 9. Mrs. Mathews, trespasser, Newaygo, struck by train, slightly injured, deafness of Mrs. Mathews caused accident; lack of caution.

—— ——. Unknown passenger, Pigeon, got off train in motion, slightly bruised; lack of caution.

December 9. C. Root, brakeman, Johnsville, hand bruised coupling cars.

December 30. M. Wheeler, brakeman, Twin Lake, two fingers broken coupling cars.

TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | 4 | | | 3 | |
| Derailments | | | | | | |
| Falling from trains | 1 | 2 | | 1 | | |
| Frogs | | 1 | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | | |
| Overhead obstructions | | 1 | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | 4 | | | 3 |
| Total | 1 | 8 | 4 | 1 | 3 | 3 |

SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 13 |
| Same in Michigan, | 13 |
| Number of persons injured during the year on the entire line, | 7 |
| Same in Michigan, | 7 |
| Number of casualties purely accidental in Michigan, | — |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 20 |
| Persons killed or injured in Michigan while intoxicated, | 2 |
| Trespassers and tramps killed or injured in Michigan, | 4 |
| Suicides in Michigan, | — |

STATE OF MICHIGAN, }
COUNTY OF MUSKEGON, } ss.

Geo. C. Kimball, General Manager of the Chicago & West Michigan Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, GEO. C. KIMBALL,
*General Manager.*

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.

[L. S.] N. WARD,
*Notary Public.*

# ANNUAL REPORT

OF THE

# WHITE RIVER RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## GENERAL REMARKS.

The road of this company is owned and operated by the Chicago & West Michigan Railway Company, and all details of mileage, earnings, expenses, and traffic statistics are included with the report of the latter company.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, GEO. C. KIMBALL, Muskegon, Mich.
*Vice President*, F. A. NIMS, Muskegon, Mich.
*Secretary and Treasurer*, CHAS. MERRIAM, Boston, Mass.
*General Manager*, GEO. C. KIMBALL, Muskegon, Mich.
*Auditor*, H. PARK, Muskegon, Mich.
*General Passenger Agent*, A. M. NICHOLS, Grand Rapids, Mich.
*Attorney*, F. A. NIMS, Muskegon, Mich.

## DIRECTORS.

H. H. HUNNEWELL, Boston, Mass.
CHAS. F. ADAMS, JR., Boston, Mass.
N. THAYER, JR., Boston, Mass.
N. THAYER, Boston, Mass.
WALTER HUNNEWELL, Boston, Mass.
CHAS. MERRIAM, Boston, Mass.
GEO. C. KIMBALL, Muskegon, Mich.

Term expires April 19th, 1882.

## STOCKHOLDERS, STOCKS, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 32 |
| Number of stockholders in Michigan at same date, | 1 |
| Amount of full-paid stock held in Michigan at same date, | $1,000 00 |

Date of annual meeting of stockholders,—third Wednesday in April.

Fiscal year of company ends December 31st.
General offices of the company are located at Muskegon, Mich., and Boston, Mass.

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $130,000 00 |
| Par value of shares, | $100 00 | |
| Average price received per share, | $100 00 | |
| Amount issued, $107,000, No. of shares, 1,070 | | |
| Amount paid in on common, | $107,000 00 | |
| Total amount paid in as per books of the Company, | | 107,000 00 |
| Amount realized in cash, | $107,000 00 | |
| Amount paid in per mile of road owned by company, | | 8,230 77 |

## ANALYSIS OF DEBT ACCOUNTS.

### FLOATING DEBT.

| | | |
|---|---|---|
| Total debt liabilities, | | $15,489 19 |
| Amount of debt liabilities per mile of road [13 miles], | $1,196 86 | |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not Reported Separately), Built by Company.*

| | |
|---|---|
| Total expended for construction, | $122,048 75 |
| Average cost of construction per mile of road (not including sidings), [13 miles], | 9,388 36 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $122,048 75 |
| Average cost of same per mile, | 9,388 36 |
| Proportion of cost of road and equipment for Michigan, | 122,048 75 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | $122,048 75 | |
| | | $122,048 75 |
| Cash items: | | |
| Cash, | $440 44 | |
| | | 440 44 |
| Total assets, | | $122,489 19 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock. | $107,000 00 | $107,000 00 |
| Unfunded debt: | | |
| Vouchers and accounts, | $15,489 19 | $15,489 19 |
| Total liabilities, | | $122,489 19 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From White Cloud to Crooked Lake, December, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 13 00 | |
| Total length completed, | | 13 00 |
| Total length of road belonging to this company, | | 13 00 |
| Total length of road belonging to this company in Michigan, | 13 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 1 86 |
| Aggregate length of tracks belonging to this company computed as single track, | | 14 86 |
| Same in Michigan, | 14 86 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs., | | 14 86 |

STATE OF MICHIGAN, }
COUNTY OF MUSKEGON, } ss.

Geo. C. Kimball, General Manager of the White River Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed) GEO. C. KIMBALL,
*General Manager.*

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.
(L. S.) N. WARD,
*Notary Public.*

# ANNUAL REPORT

OF THE

# DETROIT, GRAND HAVEN & MILWAUKEE RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, FRANCIS D. GREY, Detroit.
*Managing Director*, FREDERICK BROUGHTON, Detroit.
*Secretary*, JAMES H. MUIR, Detroit.
*Assistant Manager*, JOHN BURTON, Detroit.
*Superintendent*, W. J. MORGAN, Detroit.
*Engineer*, GEORGE MASSON, Detroit.
*Master Mechanic*, F. PARKER, Detroit.
*General Passenger and Freight Agent*, T. TANDY, Detroit.
*Attorney*, GEORGE JEROME, Detroit.

## DIRECTORS.

FRANCIS D. GREY, Putney, England.
JAMES BALD, Glasgow, Scotland.
THOMAS BARKWORTH, London, England.
FREDERICK BROUGHTON, Hamilton, Ontario.
SAMUEL BARKER, Hamilton, Ontario.
CHARLES K. DOMVILLE, Hamilton, Ontario.
JOSEPH HOBSON, Hamilton, Ontario.
JOHN W. MACLURE, Manchester, England.
GEORGE B. SPRIGGS, Hamilton, Ontario.

Term expires first Monday in October.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election, - - - 16
Number of stockholders in Michigan at same date, - - 2
Amount of full-paid stock held in Michigan at same date, $1,499,650,—$1,499,550 of it jointly with others.

Date of annual meeting of stockholders,—First Monday in October.
Fiscal year of company ends 31st December.
General offices of the company are located at Detroit, Mich.

## GENERAL EXHIBIT.

| | | Debit. | Credit. |
|---|---|---|---|
| Total income, | | | $1,196,929 50 |
| Total expense, including taxes, | | $883,608 53 | |
| Net income, | | | $313,320 97 |
| Interest on funded debt, | | 278,655 00 | |
| Balance applicable to dividends, | | | $34,665 97 |
| Dividends declared: | | | |
| Three per cent for last year, | $45,000 00 | | |
| Four per cent to June 30, 1881, | 60,000 00 | | |
| | | 105,000 00 | |
| Balance for the year,—deficit, | | $70,334 03 | |
| Balance (profit and lost) last year, | | | 55,405 35 |
| Add or deduct various entries made during the year not including the above (specifying same): | | | |
| Amount received on account of interest on balances less exchange, | | | 8,260 02 |
| Unexpended balance of equipment fund charged off last year and not used as estimated, | | | 71,966 20 |
| Balance (profit and loss) carried forward to next year, | | 65,297 54 | |
| | | $135,631 57 | $135,631 57 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $1,500,000 00 |
| Par value of shares, | $50 00 | | |
| Average price received per share, | $50 00 | | |
| Amount issued, $1,500,000.00; shares, 30,000 | | | |
| Amount paid in on common, | | $1,500,000 00 | |
| Total amount paid in as per books of the company, | | | 1,500,000 00 |
| Amount realized in property, | | $1,500,000 00 | |
| Amount paid in per mile of road owned by company,—189 miles, | | $7,936 51 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage (Equipment) Bonds (due 14th November, 1918, interest @ 6 per cent, payable 1st April and 1st October), | | $2,000,000 00 |
| Second Mortgage (Consolidated) Bonds (due 15th November, 1918, interest 5 per cent to 15th November, 1883, and thereafter 6 per cent, payable 1st April and 1st October), . . | | 3,200,000 00 |
| Total amount of funded debt, . . . . . | | $5,200,000 00 |
| Amount received from the same in property, | $5,200,000 00 | |

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for real estate, . . . . | $8,000 00 | |
| Other debts,—current credit balances, etc., . | 281,759 57 | 289,759 57 |
| Total debt liabilities, . . . . . | | $5,489,759 57 |
| Amount of debt liabilities per mile of road [189 miles], . . . . . | 29,046 34 | |
| Amount of assets not representing permanent investments, after deducting above floating debt, . . . . . | | 109,358 76 |

## COST OF ROAD AND EQUIPMENT.

*Cost of Road and Branches (not reported separately), Built by Company.*

Details of cost of construction cannot be given, as road was largely built before coming into possession of present company.

| | |
|---|---|
| Total expended for construction, . . . . . | $6,030,000 00 |
| Average cost of construction per mile of road (not including sidings) [189 miles]. . . . . | 31,904 76 |
| Proportion of cost of construction for Michigan, . . . | 6,030,000 00 |

*Cost of Equipment.*

Cannot give particulars.

| | |
|---|---|
| Total for equipment, . . . . . | $670,000 00 |
| Average cost of equipment per mile of road operated by company, [189 miles], . . . . . | 3,544 97 |
| Proportion of cost of equipment for Michigan, . . . | 670,000 00 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, . . . . . | $6,700,000 00 |
| Average cost of same per mile, . . . . . | 35,449 73 |
| Proportion of cost of road and equipment for Michigan, . | 6,700,000 00 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Land, | $1,000 00 |
| Passenger and freight stations, wood-sheds, and water stations, | 4,077 00 |
| New locomotives, | 28,620 00 |
| New passenger cars, | 9,929 65 |
| New freight cars, | 26,929 85 |
| Any other expenditures charged to property account (specifying the same): | |
| Alteration and extension of Detroit yard, | 23,532 63 |
| Slip dock at Detroit, | 9,259 91 |
| Wharves at Detroit & Grand Haven, | 8,075 74 |
| New sidings, | 29,128 76 |
| Bridges, | 7,174 65 |
| Culverts, | 1,471 08 |
| Steel rails, | 12,494 51 |
| Safes, | 655 00 |
| Total charges to property account during the year, | $162,348 78 |
| Net addition to property account for the year, | *$162,348 78 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $457,324 04 | |
| From through passengers, | 38,996 98 | |
| From express and baggage, | 20,963 53 | |
| From mails, | 23,678 76 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $540,983 31 |
| Earnings per train mile run [470,056 miles], | $1.15 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $532,772 51 | |
| From through traffic, | 119,852 28 | |
| From other sources, freight department, | 145 82 | |
| Total earnings, freight department, | | $652,770 61 |
| Earnings per train mile run [341,429 miles], | $1 91 | |
| Total transportation earnings, | | $1,193,753 92 |
| Earnings per mile of road operated [189 miles], | $6,316 16 | |

* This expenditure being made out of the proceeds of the Equipment Mortgage Bonds, heretofore credited with cost of equipment, it is not added to the cost of the road and equipment in this report.

| | | |
|---|---|---|
| Earnings per train mile run, from all trains earning revenue [811,485 miles], | $1 47 | |
| Proportion of earnings for Michigan, | $1,193,753 92 | |
| Rents for use of road, stations, etc., | | $3,175 58 |
| Total income from all sources, | | $1,196,929 50 |
| Proportion of income for Michigan, | 1,196,929 50 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track,—including amount placed to to credit of Rail Renewal Fund, | $87,642 03 |
| Renewal of rails, | 38,166 23 |
| Renewal of ties, | 26,915 18 |
| Repairs of bridges, including culverts and cattle guards, | 20,696 88 |
| Repairs of fences, road-crossings, and signs, | 13,572 05 |
| Repairs of buildings, | 23,023 93 |
| Total, | $210,016 30 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

Including amount placed to credit of Locomotive and Car Renewal Funds:

| | |
|---|---|
| Repairs of locomotives, | $49,186 81 |
| Repairs of passenger cars, | 41,669 02 |
| Repairs of freight cars, | 43,604 08 |
| Total, | $134,459 91 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $87,715 57 |
| Water-supply, | 4,466 11 |
| Oil and waste, | 3,465 05 |
| Locomotive service, | 64,046 66 |
| Passenger train service, | 22,236 90 |
| Passenger train supplies, | 4,010 20 |
| Freight train service, | 24,297 82 |
| Freight train supplies, | 1,019 80 |
| Mileage of freight cars (debit balance), | 23,351 87 |
| Damage and loss of freight and baggage, | 17,561 27 |
| Damage and loss of freight and baggage, | 215 13 |
| Damages to property and cattle, | 902 36 |
| Personal injuries, | 838 50 |
| Agents and station service, | 163,683 26 |
| Station supplies, | 27,670 38 |
| Total, | $445,480 88 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $13,800 00 |
| Salaries of clerks in general offices, | 14,778 24 |
| Law expenses, | 7,096 09 |
| Insurance,—including amount placed to credit of insurance fund, | 8,897 15 |
| Stationery and printing, | 802 43 |
| Outside agencies and advertising, | 19,609 33 |
| Contingencies, | 2,541 67 |
| Taxes in Michigan, | 26,126 53 |
| Total, | $93,651 44 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Including amounts placed to credit of Rail, Locomotive and Car Renewal Funds, and Insurance Fund: | |
| Maintenance of way and buildings, | $210,016 30 |
| Maintenance of motive power and cars, | 134,459 91 |
| Conducting transportation, | 445,480 88 |
| General expenses, including taxes, | 93,651 44 |
| Total operating expenses, renewal funds, and taxes, | $883,608 53 |

| | | |
|---|---|---|
| Operating expenses, renewal funds, and taxes per mile of road, | $4,675 18 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [811,485 miles], | | $1 08.89 |
| Proportion of operating expenses and renewals, etc., funds, and taxes for Michigan, | $883,608 53 | |
| Per centage of expenses to earnings, | 73.82 | |
| Net earnings per mile of road, | $1,657 78 | |
| Net earnings per train mile, | | 0 38.61 |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | | $6,700,000 00 |
| Equipment account, | | |
| Cash items: | | |
| Cash, | 48,482 32 | |
| Bills receivable, | $245,000 00 | |
| Due from agents and companies, | 92,245 00 | |
| | | 385,727 31 |
| Other assets: | | |
| Materials and supplies, | $38,743 02 | |
| Debit balances, | 11,809 08 | |
| Amount paid for additional land for enlargement of Detroit depot, | 149,155 44 | |

| | | |
|---|---|---|
| Balance of expenditure to 31st December 1881, payable from proceeds of Equipment Bonds, | $1,581 94 | |
| | | $201,289 48 |
| Total assets, | | $7,287,016 79 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $1,500,000 00 |
| Funded debt, | | 5,200,000 00 |
| Unfunded debt: | | |
| Interest unpaid, unclaimed and accrued, | $81,875 15 | |
| Dividends unpaid, | 60,000 00 | |
| Vouchers, accounts, and current credit balances, | 124,338 16 | |
| Due on land purchased, | 8,000 00 | |
| State tax accrued, payable 1st July, 1882, | 12,585 70 | |
| Balance due for siding to Asylum for the Insane at Pontiac, | 2,960 56 | |
| | | $289,759 57 |
| Rail, Locomotive, and Car Renewal Funds, and Insurance Fund, | 182,717 35 | |
| Other liabilities (book accounts, not due to others), | 49,242 33 | |
| | | 231,959 68 |
| Profit and loss, or income accounts, | | 65,297 54 |
| Total liabilities, | | $7,287,016 79 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Detroit to Royal Oak, in autumn of 1838.
From Royal Oak to Birmingham, in spring of 1841.
From Birmingham to Pontiac, in September of 1844.
From Pontiac to Fentonville, 2d October, 1855.
From Fentonville to Owosso, 1st July, 1856.
From Owosso to Spring Lake, 1st September, 1858.
From Spring Lake to Grand Haven, 22d November, 1858.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 189 00 | |
| Total length completed, | | 189 00 |
| Total length of road belonging to this company, | | 189 00 |
| Total length of road belonging to this company in Michigan, | 189 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 49 99 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Same in Michigan, | 49 99 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 238 99 |
| Same in Michigan, | 238 99 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 50, 56, and 57½ lbs., | 187 00 | |
| Total length of track laid with iron rails, weight per yard, 60 lbs., | | 51 99 |
| Total miles of road operated by this company, | | 189 00 |
| Total miles of road operated by this company in Michigan, | 189 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 1; aggregate length, feet, | 90 |
| Iron bridges, number of, | 10; aggregate length, feet, | 2,268 |
| Wooden trestles, | 36; aggregate length, feet, | 3,606 |
| Total, | 47 | 5,964 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 223 |
| Stone, number, | 99 |
| Iron, number, | 44 |
| Sewer pipe, number, | 96 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 418 |
| Number of cattle guards renewed during the year, | 16 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Grand Trunk R'y, four miles west of Detroit,
Detroit & Bay City (Michigan Central) R. R., four miles west of Detroit.
Flint & Pere Marquette R. R., at Holly.
Chicago & Grand Trunk R. R., at Durand.
Jackson, Lansing & Saginaw R. R., at Owosso.
Detroit, Lansing & Northern R. R., at Ionia.
Grand Rapids & Indiana R. R., at Grand Rapids.
Chicago & West Michigan R. R., at Grand Rapids.
Chicago & West Michigan R. R., at Ferrysburg.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 247 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 18 |
| Number of crossings of highways at grade in this State without signs, | None. |

| | |
|---|---|
| Number of crossings of highways over railroad, | 10 |
| Number of crossings of highways under railroad, | 13 |
| Number highway bridges 18 feet above track, | 7 |
| Number highway bridges less than 18 feet above track, | 3 |

Have safety-guards been erected at over-head obstructions?
Yes, at all overhead bridges under 20 feet above rail.

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 36 |
| Same in Michigan, | 36 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 1,059 |
| Same in Michigan, | 1,019 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 385 |
| What is the average cost per rod? | $1 00 |
| The total cost of same? | $123,200 00 |
| How many miles of new fencing have you built during the year? | 2 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 37 |
| Average length of sections, | 5.1 miles. |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 90,128 |
| Number of new ties put in track in Michigan, | 90,128 |
| Average number of new ties per mile of road, | 397 |
| New rails put in track: | |
| Steel [tons 900] miles, | 10.22 |
| Total miles of track laid with new rails, | 10.22 |

Between what points were new rails laid:
Drayton Plains and Fenton.
Ovid and St. Johns.
Ionia and Grand Rapids.

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 61,897 |
| Amount of trestle work replaced with earth during the year (linear feet), | 199 |

| | |
|---|---|
| Timber culverts replaced with stone,—number, | 3 |
| Timber culverts replaced with iron pipe,—number, | 7 |
| New bridges built during the year,—number, | 1 |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Shiawassee River, near Vernon | Plate-girder | Iron | November | 146 |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 6 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 28 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 5 |
| Number of passenger cars—12-wheel, | 3 |
| Number of passenger cars—8-wheel, | 26 |
| Number express and baggage cars, | 11 |
| Number of box freight cars, | 369 |
| Number of stock cars, | 48 |
| Number of platform cars, | 198 |
| Number of conductors' way cars, | 11 |
| Other cars as follows: Combination passenger and baggage, 8; auxiliary car, 1; charcoal cars, 18; furniture cars, 3, | 30 |
| Number of locomotives equipped with train-brake, | 16 |
| Number of cars used in passenger trains equipped with train-brake, | 42 |
| What kind of train-brake is in use on your road? | Westinghouse. |
| Number of passenger train cars with Miller platform and buffer, | 42 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 470,056 |
| Miles run by freight trains during the year, | 341,429 |
| Total mileage of trains earning revenue, | 811,485 |
| Miles run by work trains during the year, | 53,036 |
| Miles run by switching trains, | 175,287 |
| Total train mileage, | 1,039,808 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 4 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 107 |
| Average number of cars in freight trains, | 23 |
| Average weight of freight trains, exclusive of freight,—tons, | 265 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 11,948 | | |
| Number of local passengers carried, | 519,807½ | | |
| Total number of passengers carried, | 531,755½ | | |
| Total passenger mileage, or passengers carried one mile, | 19,116,093 | | |
| Average distance traveled by each passenger, | | 35.9 | |
| Average amount received from each passenger, | | | $0.93 |
| Highest rate of fare per mile, for any distance, | | | 0.03 |
| Lowest rate of fare per mile, for any distance, | | | 0.00.75 |
| Average rate of fare per mile, for through passengers, | | | 0.01.72 |
| Average rate of fare per mile, for local passengers, | | | 0.02.71 |
| Average rate of fare per mile, for all passengers, | | | 0.02.65 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 138,237 | |
| Number of tons of local freight carried, | 350,973 | |
| Total tons of freight carried, | 489,210 | |
| Total mileage of through freight, | | 26,112,591 |
| Total mileage of local freight, | | 24,806,508 |
| Total freight mileage, or tons carried one mile, | | 50,919,099 |
| Average ton haul for through freight, | | 188.89 |
| Average ton haul for local freight, | | 70,67 |
| Average ton haul for all freight, | | 104,08 |
| Average amount received for each ton haul, | | $1.33 |
| Average rate per ton per mile, received for through freight, | | 00.46 |
| Average rate per ton per mile, received for local freight, | | 02.15 |
| Average rate per ton per mile, received for all freight, | | 01.28 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 69,725 | 14.252 |
| Flour, | 79,408 | 16.232 |
| Provisions (beef, pork, lard, etc.), | 7,747 | 1.584 |
| Other agricultural products, | 10,254 | 2.096 |
| Lumber and forest products, | 89,370 | 18.268 |
| Coal, | 35,145 | 7.184 |
| Plaster, | 7,331 | 1.498 |
| Salt, | 2,080 | .426 |
| Stone and brick, | 3,617 | .739 |
| Merchandise and other articles not enumerated above, | 184,533 | 37.721 |
| Total tons carried, | 489,210 | 100.000 |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company has exclusive right for passenger trains, having half of baggage car on mail and steamboat express trains each way daily.

It pays $50 per day for not exceeding 5,000 lbs. per day, and 60c per 100 lbs. excess.

It carries light freight, money, etc., and takes freight to and from depots.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Merchants' Despatch Transportation Company, New York; uses its own cars for which we pay mileage run on this railway. The railway company is responsible for damage to cars and contents, and pays commission for getting the business. No preference given to freight in speed or transportation.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Jno. S. Newberry and James McMillan, Detroit, | $15,051 49 |
| Erie & Chicago Car Company, Detroit, | 5,720 34 |
| Merchants' Despatch Transportation Company, New York, | 4,818 74 |
| Empire Transportation Company, Philadelphia, | 58 35 |
| National Car Company, St. Albans, Vt., | 691 74 |
| | $26,340 66 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Two sleeping cars owned by this company (one of them altered from chair and sleeping car in November, 1881), and during the summer of 1881, three sleeping cars were hired at 2c. per mile, the owners collecting for use of couches. Charge for couches, $1.25.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

$1,623.12 to New York Sleeping Car Company, New York city.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$23,698.76 per annum, carrying mail agents and special agents of the Post Office Department free, and collecting and delivering mail bags from and to post offices at Detroit, Lyons Mills, and Grand Haven.

*Telegraph.*

Number of miles of telegraph owned by company, . . . 189

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

KILLED.

January 3. F. Kaulitz, laborer, Owosso, coal bucket falling; want of care.

January 4. Alonzo Nash, teamster, Royal Oak, crossing track; carelessness.

January 4. S. Cooper, trespasser, Fenton, lying on track; carelessness.

February 3. Jno. Caswell, switchman, Detroit, knocked off train by bridge; want of care.

March 9. Wm. Forsyth, switchman, Detroit, caught between cars; want of care.

March 27. J. J. McQueen, switchman, Detroit, slipped on track; want of care.

April 6. A. A. Jenks, trespasser, Owosso, walking on track; carelessness.

August 6. R. Donahue, trespasser, Detroit, jumping off train; carelessness.

October 14. James Thorn, brakeman, Owosso, slipped while uncoupling; want of care.

October 22. James Eldridge, trespasser, Saranac, found on track.

November 2. Jno. Gould, switchman, Detroit, foot caught in guard-rail; want of care.

November 28. T. W. Robinson, trespasser, Pewamo, walking on track; carelessness.

December 6. N. Malloy, brakeman, Grand Haven, fell from train; carelessness.

INJURED.

April 19. J. A. Rodgers, teamster, Ionia, had wagon too close to track; carelessness.

August 9. Wm. McConnell, passenger, Fowler, jumping off train in motion; carelessness.

August 15. Jno. Mull, trespasser, St. Johns, crossing track in front of train; carelessness.

August 15. Jno. Biggers, laborer, Ada, unloading iron; want of care.

August 15. W. Merritt, laborer, Ada, unloading iron; want of care.

August 30. Evan Davis, trespasser, Corunna, lying on track; carelessness.

October 9. L. Farrell, brakeman, Detroit, fell from train; carelessness.

October 25. Mrs. Evans, passenger, Nunica, collision, connecting road blocked train and failed to give signal.

August 25. Miss Evans, passenger, Nunica, collision; connecting road blocked train and failed to give signal.

August 29. G. J. Kinke, trespasser, Detroit, jumping on train in motion; carelessness.

November 4. John McMillan, passenger, Ionia, jumping off train in motion; carelessness.

November 4. H. Sheffield, passenger, Cooperville, train parting and coming together.

November 4. Chas. Harris, switchman, Detroit, cars coming together; want of care.

November 6. A. Wright, switchman, Detroit, coupling cars; want of care.

November 12. W. Wells, brakeman, Ionia, coupling cars; want of care.

November 17. H. Harmon, brakeman, Detroit, coupling cars; want of care.

December 18. L. Snyder, trespasser, Grand Rapids, jumping from train in motion; want of care.

TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | 2 | | |
| Coupling cars | | 3 | | | 3 | |
| Derailments | | | | | | |
| Falling from trains | | 1 | | | 1 | |
| Frogs | | 1 | | | | |
| Getting on and off trains | | | | 2 | | |
| Highway crossings | | | 1 | | | |
| Miscellaneous | | 1 | | 1 | 3 | 1 |
| Overhead obstructions | | 1 | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | 5 | | | 4 |
| Total | | 7 | 6 | 5 | 7 | 5 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 13 |
| Same for Michigan, | 13 |
| Number of persons injured during the year on the entire line, | 17 |
| Same for Michigan, | 17 |
| Number of casualties purely accidental in Michigan, | 3 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 27 |
| Persons killed or injured in Michigan while intoxicated, | Unknown. |
| Trespassers and tramps killed or injured in Michigan, | 9 |
| Suicides in Michigan, | Nil. |

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

James H. Muir, Secretary of the Detroit, Grand Haven, and Milwaukee Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), JAS. H. MUIR.

Subscribed and sworn to before me, this 25th day of April A. D. 1882,
[L. S.] WILLIAM H. RUSSELL,
*Notary Public, Wayne County, Mich.*

# ANNUAL REPORT

OF THE

# DETROIT, HILLSDALE & SOUTHWESTERN RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

This road was operated by the corporation owning it until September 19th, when it was leased to the Lake Shore & Michigan Southern Railway Company, and its business for the remaining portions of the year is included in the report of the latter corporation.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* ELIJAH SMITH, Boston, Mass.
*Vice President,* WM, ENDICOTT, JR., Boston, Mass.
*Secretary and Treasurer,* PROSPER W. SMITH, Boston, Mass.
*General Manager,* J. W. SMITH, Ypsilanti, Mich.
*General Superintendent,* WM. F. PARKER, Ypsilanti, Mich.

## DIRECTORS.

ELIJAH SMITH, Boston, Mass.
HENRY ENDICOTT, Boston, Mass.
WILLIAM ENDICOTT, JR., Boston, Mass.
C. W. LORING, Boston, Mass.
E. L. GIDDINGS, Boston, Mass.
P. W. SMITH, Boston, Mass.
JAS. W. POTTER, Boston, Mass.
JAS. P. COOK, Salem, Mass.
JOHN B. ALLEY, Lynn, Mass.

Term expires January 9th, 1883.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 232 |
| Number of stockholders in Michigan at same date, | 9 |
| Amount of full-paid stock held in Michigan at same date, | $49,400 00 |

Date of annual meeting of stockholders,—second Tuesday in January.

Fiscal year of company ends calendar year.
General offices of the company are located at Ypsilanti, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $50,084 25 |
| Total expense, including taxes, | $51,967 47 | |
| Net deficit, | $1,883 22 | |
| Interest on funded debt, | 44 80 | |
| Balance for the year, 1881, | $1,928 02 | |
| Balance (profit and loss) last year,—deficit, | 9,455 33 | |
| Balance forward to next year, | | 11,383 35 |
| | $11,383 35 | $11,383 35 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $1,350,000 00 |
| Par value of shares, | $100.00 | | |
| Average price received per share, | $100.00 | | |
| Amount issued, $1,344,000, No. of shares, 13,440 | | | |
| Amount paid in on common, | | $1,344,000 00 | |
| Total amount paid in as per books of the company, | | | 1,344,000 00 |
| Amount in property, | | $1,344,000 00 | |
| Amount paid in per mile of road owned by company, | | | 20,740 75 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

None.

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for equipment, | $12,000 00 | |
| Incurred in any other manner and how,—scrip, | 40 00 | |
| | | $12,040 00 |
| Total debt liabilities, | | $12,040 00 |
| Amount of debt liabilities per mile of road [64.8 miles], | | $185 80 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | 12,040 00 |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not reported separately), Built by Company.*

The road having been constructed previous to purchase by original company the details of expenditure cannot be given.

| | |
|---|---|
| Total expended for construction, | $1,287,648 59 |
| Average cost of construction per mile of road (not including sidings), [64.8 miles], | 19,871 18 |
| Proportion of cost of construction for Michigan, | 1,287,648 59 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $32,465 94 |
| Passenger, mail, and baggage cars, | 14,869 30 |
| Freight and other cars, | 21,450 00 |
| Machinery and tools, | 3,555 92 |
| Total for equipment, | $72,341 16 |
| Average cost of equipment per mile of road operated by company [64.8 miles], | 1,116 37 |
| Proportion of cost of equipment for Michigan, | 72,341 16 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $1,359,989 75 |
| Average cost of same per mile, | 20,987 50 |
| Proportion of cost of road and equipment for Michigan, | 1,359,989 75 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| New locomotives, | $7,404 20 |
| New passenger cars, | 7,869 30 |
| Total charges to property account during the year, | $15,273 50 |
| Net addition to property account for the year, | $15,273 50 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $15,826 27 | |
| From through passengers, | | |
| From express and baggage, | 1,256 41 | |
| From mails, | 3,024 12 | |
| Total earnings, passenger department, | | $20,106 80 |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | | $29,481 61 |
| From through traffic, | | |
| From other sources, freight department, | | |
| Total earnings, freight department, | | $29,481 61 |
| Total transportation earnings, | | $49,588 41 |
| Earnings per mile of road operated [64.8 miles], | $765 25 | |
| Proportion of earnings for Michigan, | 49,588 41 | |
| Income from all other sources, | | 495 84 |
| Total income from all sources, | | $50,084 25 |
| Proportion of income for Michigan, | 50,084 25 | |

EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | |
| Maintenance of motive power and cars, | $51,967 47 | |
| Conducting transportation, | | |
| General expenses, including taxes, | | |
| Total operating expenses and taxes, | | $51,967 47 |
| Operating expenses and taxes per mile of road, | $786 53 | |
| Proportion of operating expenses and taxes for Michigan, | $51,967 47 | |
| Per centage of expenses to earnings [105] | | |
| Net loss per mile of road, | $21 28 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | | $1,287,648 59 |
| Equipment account, | | 72,341 16 |
| Cash items: | | |
| Cash, | | $225 41 |
| Profit and loss,—deficit, | | 11,383 35 |
| Total assets, | | $1,371,598 51 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $1,350,000 00 |
| Unfunded debt: | | |
| Notes payable, | 12,000 00 | |
| Vouchers and accounts, | 9,558 51 | |
| Scrip outstanding, | 40 00 | |
| | | 21,598 51 |
| Total liabilities, | | $1,371,598 51 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Ypsilanti to Saline, July, 1871.
From Saline to Manchester, September, 1871.
From Manchester to Hillsdale, January, 1872.
From Hillsdale to Bankers, November, 1872.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 64 80 | |
| Total length completed, | | 64 80 |
| Total length of road belonging to this company, | | 64 80 |
| Total length of road belonging to this company in Michigan, | 64 80 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 3 40 |
| Same in Michigan, | 3 40 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 68 20 |
| Same in Michigan, | 68 20 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs. | | 68 20 |
| Total miles of road operated by this company, | | 64 80 |
| Total miles of road operated by this company in Michigan, | 64 80 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 25; aggregate length, feet, | | 3,096 |
| Total, | 25 | 3,096 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Lake Shore & Michigan Southern R. R., at one mile west of Manchester.
Toledo A. A. & G. T. R. R., at Pittsfield.

What railroads cross your road either over or under your grade in this State, and where?
Lake Shore & Michigan Southern R. R., at one-half mile east of Hillsdale.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 85 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | None. |
| Number of crossings of highways at grade in this State without signs, | 17 |
| Number of crossings of highways over railroad, | 1 |

| | |
|---|---|
| Number of crossings of highways under railroad, | 1 |
| Number of highway bridges 18 feet above track, | 1 |
| Have safety-guards been erected at over-head obstructions? | No. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 14 |
| Same in Michigan, | 14 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | About 50. |
| Same in Michigan, | All. |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 120 |
| How many miles of new fencing have you built during the year? | None. |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Washtenaw county, | 5.50 |
| In Lenawee county, | .50 |
| In Hillsdale county, | 3.60 |
| Total miles, | 9.60 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 10 |
| Average length of sections (miles), | 6½ |
| Average number of men in each section gang, | 3 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 2 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of passenger cars—8-wheel, | 2 |
| Number of express and baggage cars and passenger combined, | 2 |
| Number of box freight cars, | 30 |
| Number of stock cars, | 10 |
| Number of platform cars, | 2 |
| Number of coal cars, | 8 |
| Number of conductors' way cars, | 2 |
| Number of locomotives equipped with train-brake, | 2 |

Number of cars used in passenger trains equipped with train-brake, - - - - - - - - - - - 4
What kind of train-brake is in use on your road? - - - Westinghouse.
Number of passenger train cars with Miller platform and buffer, - - - - - - - - - - 4

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American—1½ first-class, and half fare for messenger; general express; at depot.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

None.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$3,024.12 per annum.

### *Telegraph.*

Number of miles of telegraph owned by company, - - - None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

American Union (now Western Union), - - - - - - 64

STATE OF MASSACHUSETTS, }
COUNTY OF SUFFOLK, } ss.

Prosper W. Smith, Secretary of the Detroit, Hillsdale & Southwestern Railroad Company, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the fifteenth day of September, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), P. W, SMITH,

Subscribed and sworn to before me, this 11th day of July, A. D. 1882.

[L. S.] CHAS. MERRIAM,
*Notary Public.*

# ANNUAL REPORT

OF THE

# DETROIT, LANSING & NORTHERN RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ALPHEUS HARDY, Boston, Mass.
*Secretary and Treasurer*, CHAS. MERRIAM, Boston, Mass.
*Assistant Treasurer*, JAS. E. HOWARD, Detroit, Mich.
*General Manager*, JOHN B. MULLIKEN, Detroit, Mich.
*General Superintendent*, THOMAS M. FISH, Ionia, Mich.
*Engineer*, JOHN J. McVEAN, Ionia, Mich.
*General Accountant*, JAS. F. REEKIE, Detroit, Mich.
*General Passenger Agent*, *General Freight Agent*, . } WM. A. CARPENTER, Detroit, Mich.
*Solicitor*, GEO. V. N. LOTHROP, Detroit, Mich.

## DIRECTORS.

ALPHEUS HARDY, Boston, Mass.
NATHANIEL THAYER, Boston, Mass.
JOHN A. BURNHAM, Boston, Mass.
H. H. HUNNEWELL, Boston, Mass.
GEO. O. SHATTUCK, Boston, Mass.
CHAS. L. YOUNG, Boston, Mass.
CHAS. MERRIAM, Boston, Mass.
CHAS. F. ADAMS, JR., Boston, Mass.
NATHANIEL THAYER, JR., Boston, Mass.
JAMES H. BLAKE, Boston, Mass.
ALPHEUS H. HARDY, Boston, Mass.

Term expires the 2d Wednesday in May, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, . . . | 392 |
| Number of stockholders in Michigan at same date, . . | None. |
| Amount of full-paid stock held in Michigan at same date, . | None. |

Date of annual meeting of stockholders,—the second Wednesday in May.
Fiscal year of company ends December 31st.
General offices of the company are located at Boston, Mass., Detroit, and Ionia, Mich.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $1,377,698 80 |
| Total expense, including taxes, | $934,429 41 | |
| Net income, | | $443,269 39 |
| Interest on funded debt, | 221,883 66 | |
| Balance applicable to dividends, | | $211,385 73 |
| *Dividends declared (seven per cent on preferred stock), | 175,231 00 | |
| Balance for the year, | | $36,154 73 |
| Balance (profit and loss) last year, | | 102,973 13 |
| Balance forward to next year, | 139,127 86 | |
| | $139,127 86 | $139,127 86 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $4,410,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $432,890.00, No. of shares, | 43,288 | | |
| Amount paid in on common, | | $1,825,600 00 | |
| Amount paid in on preferred, | | 2,503,300 00 | |
| Total amount paid in as per books of the company, | | | 4,328,900 00 |
| Amount realized in property, | | $4,328,900 00 | |
| Amount paid in per mile of road owned by company, | | | 19,537 39 |

* Three and one-half per cent on preferred stock for six months, ending December 31st, 1880, and three and one-half per cent on preferred stock for six months ending June 30th, 1881.

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due 1907, interest 7 per cent, payable January and July), | | $2,443,000 00 |
| Ionia and Lansing Mortgage Bonds (due 1889, interest 8 per cent, payable January and July), | | 770,000 00 |
| Total amount of funded debt, | | $3,213,000 00 |
| Amount received from the same in property, | $3,213,000 00 | |

### FLOATING DEBT.

| | |
|---|---|
| Current credit balances, etc., | 272,297 56 |
| Total debt liabilities, | $3,698,297 56 |
| Amount of debt liabilities per mile of road [221.57 miles], | 16,691 33 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | 3,364,667 18 |

Contingent liabilities as follows:

Interest assumed to May 1st, 1900, on $446,000 S. V. & St. L. R. R. bonds @ 8 % per annum.

Dividends assumed on $70,000 Saginaw & Grand Rapids R. R. stock @ 8 % per annum.

## COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

This road having been acquired by present company by purchase at foreclosure sale it is unable to give details of expenditure.

| | |
|---|---|
| Total expended for construction, | $6,926,719 97 |
| Average cost of construction per mile of road (not including sidings) [221.57 miles], | 31,261 98 |
| Proportion of cost of construction for Michigan, | $6,926,719 97 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | 210,176 88 |
| Passenger, mail, and baggage cars, | 91,859 77 |
| Freight and other cars, | 294,680 00 |
| Machinery and tools, | 26,258 50 |
| Total for equipment, | $622,975 07 |
| Average cost of equipment per mile of road operated by company [225.57 miles], | 2,761 78 |
| Proportion of cost of equipment for Michigan, | 622,975 07 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $7,545,695 04 |
| Average cost of same per mile, | 34,073 62 |
| Proportion of cost of road and equipment for Michigan, | 7,545,975 07 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $370,474 91 | |
| From through passengers, | | |
| From express and baggage, | 13,970 08 | |
| From mails, | 18,807 63 | |
| Total earnings, passenger department, | | $403,252 62 |
| Earnings per train mile run [385,571 miles], | $1 04.5 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $959,814 33 | |
| From through traffic, | | |
| Total earnings freight department, | | $959,814 33 |
| Earnings per train mile run [602,036 miles], | $1 59.4 | |
| Total transportation earnings, | | $1,363,066 95 |
| Earnings per mile of road operated [225.57 miles], | $6,042 76 | |
| Earnings per train mile run, from all trains earning revenue [987,607 miles], | $1 38 | |
| Proportion of earnings for Michigan, | $1,363,066 95 | |
| Income from all other sources: | | |
| Telegraph earnings, | $10,061 94 | |
| Miscellaneous earnings, | 4,569 91 | 14,631 85 |
| Total income from all sources, | | $1,377,698 80 |
| Proportion of income for Michigan, | $1,377,698 80 | |

### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $106,196 66 |
| Renewal of rails, | 80,064 83 |
| Renewal of ties, | 20,000 00 |

| | |
|---|---|
| Repairs of bridges, including culverts and cattle guards, | [1] $85,580 57 |
| Repairs of fences, road crossings, and signs, | [2] 21,822 94 |
| Repairs of buildings, | [3] 20,028 38 |
| Total, | $333,693 38 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $40,805 02 |
| Repairs of passenger cars, | 22,165 93 |
| Repairs of freight cars, | [4] 72,618 43 |
| Total, | $135,589 38 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $102,992 14 |
| Water-supply, | 4,329 80 |
| Oil and waste, | 7,671 62 |
| Locomotive service, | 77,226 69 |
| Passenger train service, | 21,676 54 |
| Passenger train supplies, | 10,099 51 |
| Mileage of passenger cars (debit balance), | 1,874 86 |
| Freight train service, | 32,514 81 |
| Freight train supplies, | 15,149 25 |
| Mileage of freight cars (debit balance), | 18,516 42 |
| Damage and loss of freight and baggage, | 1,552 65 |
| Damages to property and cattle, | 1,384 44 |
| Personal injuries, | 1,829 98 |
| Agents and station service, } Includes maintenance and operating of telegraph, | |
| Station supplies, } Includes maintenance and operating of telegraph, | 76,365 99 |
| Total, | $373,184 70 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $20,170 00 |
| Salaries of clerks in general offices, | 12,010 39 |
| Law expenses, | 1,500 00 |
| Insurance, | 2,351 11 |
| Stationery and printing, | 3,211 56 |
| Outside agencies and advertising, | 1,990 82 |
| Contingencies, | 18,093 20 |
| Taxes in Michigan, | 32,634 87 |
| Total, | $91,961 95 |

[1] Includes—

| | |
|---|---|
| Cost of new iron bridge over Grand River at Ionia | $42,216 63 |
| Balance of new iron bridge over Grand River at Portland | 12,929 78 |
| Cost of stone arch to replace wooden bridge at Kiddville | 5,471 22 |
| Cost of stone arch to replace wooden bridge at South Lyons | 2,111 75 |
| Cost of canal at Portland, thus doing away with two wooden bridges | 2,282 11 |
| | $66,011 44 |

[2] Includes cost of 33,220 rods of new fence.

| | |
|---|---|
| [3] Includes cost of four new water tanks | $7,303 93 |
| [4] Includes balance of cost of new cars | $16,630 00 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $333,693 38 |
| Maintenance of motive power and cars, | 135,589 38 |
| Conducting transportation, | 373,184 70 |
| General expenses, including taxes, | 91,961 95 |
| Total operating expenses and taxes, | $934,429 41 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $4,142 52 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [987,607 miles], | $0 95.6 | |
| Proportion of operating expenses and taxes for Michigan, | $934,429 41 | |
| Per centage of expenses to earnings, | 67.82 | |
| Net earnings per mile of road, | $1,965 10 | |
| Net earnings per train mile, | $0 44.8 | |

## ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | $6,926,719 97 | |
| Equipment account, | 622,975 07 | |
| | | $7,549,695 04 |
| Cash items: | | |
| Cash, | $189,512 82 | |
| Bills receivable, | 38,515 82 | |
| Due from agents and companies, | 44,177 66 | |
| | | 272,206 30 |
| Other assets: | | |
| Materials and supplies, | $54,421 05 | |
| Sinking funds, | 128,142 84 | |
| Unearned insurance premium, | 3,323 03 | |
| Ninth National Bank of N. Y., | 520 00 | |
| Chas. Merriam, Trustee, | 3,160 00 | |
| | | $189,566 92 |
| Total assets, | | $8,011,468 26 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | $4,328,900 00 | |
| Funded debt, | 3,213,000 00 | |
| | | $7,541,900 00 |
| Unfunded debt: | | |
| Interest unpaid, | $1,195 00 | |
| Vouchers and accounts, | 84,273 22 | |
| Other liabilities: | | |
| Accrued coupon interest (not due), | 116,305 00 | |
| State taxes for 1881 (due July 1, 1882), | 32,308 16 | |

| | | |
|---|---|---|
| Saginaw Valley & St. Louis R. R. Co., | $38,216 18 | |
| Detroit, Lansing & Northern R. R. sinking fund, | 58,142 84 | |
| | | $330,440 40 |
| Profit and loss, or income accounts, | | 139,127 86 |
| Total liabilities, | | $8,011,468 26 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Detroit to Howard, August, 1871.
From Ionia to Stanton, February, 1873.
From Stanton to Big Rapids, July, 1880.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths |
|---|---|---|
| Length completed in Michigan, | 156 60 | |
| Total length completed, | | 156 60 |

### BRANCHES.

| | | |
|---|---|---|
| Stanton Branch, from Stanton Junction to Big Rapids, | 63 30 | |
| Belding Branch, from Kiddville to Belding, | 1 67 | |
| Total length of branches owned by company, | | 64 97 |
| Total length of branches owned by company in Michigan, | 64 97 | |
| Total length of road belonging to this company, | | 221 57 |
| Total length of road belonging to this company in Michigan, | 221 57 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 46 63 |
| Same in Michigan, | 46 63 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 268 20 |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 56 to 60 lbs., | | 137 00 |
| Total length of tracks laid with iron rails, weight per yard, 50, 52, 57, and 60 lbs., | | 84 57 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Name, description, and length of each: | | |
| Michigan Central R. R., Detroit to Grand Trunk Junction, | 3 00 | |
| Jackson, Lansing & Saginaw R. R., Lansing to North Lansing, | 1 00 | |
| Total length of above roads, | | 4 00 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Total length of above roads in Michigan, | 4 00 | |
| Total miles of road operated by this company, | | 225 57 |
| Total miles of road operated by this company in Michigan, | 225 57 | |

*Number of Bridges and Trestles in Michigan.*

| | | | |
|---|---|---|---|
| Wooden bridges, number of, | 36; | aggregate length, feet, | 2,850 |
| Stone bridges, number of, | 5; | aggregate span, feet, | 86 |
| Iron bridges, number of, | 8; | aggregate span, feet, | 1,622 |
| Wooden trestles, | 28; | aggregate length, feet, | 2,170 |
| Total, | 77 | | 6,728 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 335 |
| Stone, number, | 3 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 463 |
| Number of cattle guards renewed during the year, | 60 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Grand Trunk R. R., at Grand Trunk Junction.
Flint & Pere Marquette R. R., at Plymouth.
Toledo, Ann Arbor & Grand Trunk R. R., at South Lyons.
Chicago & Grand Trunk R. R., at Chicago Junction.
Jackson, Lansing & Saginaw R. R., at Lansing.
Detroit, Grand Haven & M. R. R., at Ionia.
Chicago, Saginaw & Canada R. R., at Edmore.
Grand Rapids & Indiana R. R., at Big Rapids.

What railroads cross your road either over or under your grade in this State, and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 223 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 1 |
| Number of crossings of highways over railroad, | 7 |
| Number of crossings of highways under railroad, | 6 |
| Number of highway bridges 18 feet above track, | 7 |
| Number of highway bridges less than 18 feet above track, | 0 |
| Have safety-guards been erected at over-head obstructions, | No. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 66 |
| Same in Michigan, | 66 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 973 |
| Same in Michigan, | 970 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 231.57 |
| How many miles of new fencing have you built during the year? | 103.13 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 48 |
| Average length of sections, | 4.60 miles. |
| Number of men in each section gang, | 5 |
| Number of new ties put in whole line during the year, | 60,000 |
| Number of new ties put in track in Michigan, | 60,000 |
| Average number of new ties per mile of road, | 270 |
| New rails put in track: | |
| Iron [tons 842] miles, | 8 |
| Steel [tons 1,015], miles, | 10 |
| Total miles of track laid with new rails, | 18 |

Between what points were new rails laid:
Orleans and Greenville.
Sheridan and Stanton.

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 361,807 |
| Amount of trestle work replaced with earth during the year (linear feet), | 2,419 |
| Timber culverts replaced with iron pipe,—number, | 9 |
| Timber culverts replaced with sewer pipe,—number, | 30 |

New bridges built during the year,—number:

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Two miles east of Ionia | Through Truss | Iron | Oct., Nov., '81 | 546 |
| Kiddville | Double Arch | Stone | Oct., Nov., '81 | 12 feet span. |
| Green Oak | Single Arch | Stone | Nov., Dec., '81 | 10 feet span. |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 30 |
| Number of passenger cars—8-wheel, | 21 |
| Number of express and baggage cars, | 10 |
| Number of box freight cars, | 404 |
| Number of stock cars, | 16 |
| Number of platform cars, | 530 |
| Number of conductors' way cars, | 20 |
| Other cars as follows: Sleeping car, 1; pay car, 1; tool car, 1; carpenter's car, 1, | 4 |
| Number of locomotives equipped with train-brake, | 11 |
| Number of cars used in passenger trains equipped with train-brake. | 32 |
| What kind of train-brake is in use on your road? Westinghouse air brake. | |
| Number of passenger train cars with Miller platform and buffer, | 32 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 385,571 |
| Miles run by freight trains during the year, | 602,036 |
| Total mileage of trains earning revenue, | 987,607 |
| Miles run by work trains during the year, | 106,395 |
| Miles run by switching trains, | 191,634 |
| Total train mileage, | 1,285,636 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 75 |
| Average number of cars in freight trains, | 25 |
| Average weight of freight trains, exclusive of freight,—tons, | 265 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Total number of passengers carried, | 555,725 | | |
| Total passenger mileage, or passengers carried one mile, | 13,741,232 | | |
| Average distance traveled by each passenger, | | 24.73 | |
| Average amount received from each passenger, | | | $0.66.66 |

| | |
|---|---|
| Highest rate of fare per mile, for any distance, | $0.04 |
| Lowest rate of fare per mile, for any distance, | 0.01.5 |
| Average rate of fare per mile, for all passengers, | 0.02.69 |

*Freight Traffic.*

| | | |
|---|---|---|
| Total tons of freight carried, | 567,371 | |
| Total freight mileage, or tons carried one mile, | 56,069,960 | |
| Average ton haul for all freight, | 99.46 | |
| Average amount received for each ton haul, | | $1.69 |
| Average rate per ton per mile, received for all freight, | | 0.01.71 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 47,876 | 8.44 |
| Flour, | 11,123 | 1.96 |
| Provisions (beef, pork, lard, etc.) | 1,466 | .26 |
| Animals, | 7,304 | 1.29 |
| Other agricultural products, | 11,539 | 2.03 |
| Lumber and forest products, | 417,976 | 73.67 |
| Coal, | 10,323 | 1.82 |
| Plaster, | 2,766 | 49 |
| Salt, | 1,676 | 30 |
| Stone and brick, | 6,103 | 1.07 |
| Manufactures,—articles shipped from point of production, | 8,534 | 1.50 |
| Merchandise and other articles not enumerated above, | 40,685 | 7.17 |
| Total tons carried, | 567,371 | 100. |

ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. They pay this company one and one-half regular freight rates for freight, and half-fare for messenger.

They deliver their freight on board the train.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

All freight and transportation companies can run their cars over this road.

This company pays them the usual mileage, if they furnish their own cars. No preference is given except to live stock or perishable property.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Detroit Iron Furnace Co., Detroit, Mich., | $302 13 |
| Empire Line, Philadelphia, Pa., | 116 76 |
| Erie & Chicago Car Co., Detroit, Mich., | 240 95 |
| Merchants' Despatch Transportation Company, New York, N. Y., | 117 59 |
| National Line, Pittsburg, Pa., | 19 26 |
| Union Line, Pittsburg, Pa., | 102 19 |
| United States Rolling Stock Company, New York City, N. Y., | 3 72 |
| | $902 70 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

In the summer of 1881 this company procured sleeping cars from the Wagner Palace Car Company of New York, for use between Detroit and Petoskey. They were rented at a certain rate per diem. The charge to passengers for sleeping car berth was $1.00.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Wagner Palace Car Co. of New York, $2,703.82.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$18,030.16 per annum with usual terms of service.

*Telegraph.*

Number of miles of telegraph owned by company, - - 221.57

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

None.

REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

KILLED.

May 4. Jno. H. Oakley, occupation unknown, Detroit, trespasser; carelessness, company not responsible.

August 31. Chester Roller, brakeman, near Shiloh; purely accidental.

September 23. Thomas Conkling, occupation unknown, Howell, trespasser; company not responsible,

INJURED.

June 22. T. H. Coles, passenger, Fenwick, arm injured; carelessness.

May 14. P. Cooper, track laborer, Detroit, leg broken; carelessness.

August 5. Wm. Bush, conductor freight, North Lansing, head squeezed; lack of caution.

September 8. Jay Face, farmer, near Palmer's, bruised; highway collision.

September 17. Jno. Higgins, track laborer, near Sheridan, bruised, train collision; disobedience of orders.

October 18. Geo. Yakey, track laborer, near Grand Ledge, leg broken; lack of caution.

December 24. Louis Doane, brakeman, Chicago Junction, squeezed; accidental.

TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | 1 | |
| Coupling cars | | | | | 2 | |
| Derailments | | | | | | |
| Falling from trains | | | | | | |
| Frogs | | | | | | |
| Getting on and off trains | | | | 1 | | |
| Highway crossings | | | | | | 1 |
| Miscellaneous | | 1 | | | 2 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | 2 | | | |
| Total | | 1 | 2 | 1 | 5 | 1 |

SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 3 |
| Same in Michigan, | 3 |
| Number of persons injured during the year on the entire line, | 7 |
| Same in Michigan, | 7 |
| Number of casualties purely accidental in Michigan, | 2 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 8 |
| Persons killed or injured in Michigan while intoxicated, | 1 |
| Trespassers and tramps killed or injured in Michigan, | 2 |
| Suicides in Michigan, | — |

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

John B. Mulliken, General Manager, and James E. Howard, Assistant Treasurer, of the Detroit, Lansing & Northern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, JOHN B. MULLIKEN,
JAMES E. HOWARD.

Subscribed and sworn to before me, this 30th day of March, A. D. 1882.

[L. S.] URIAH B. ROGERS,
*Notary Public.*

# ANNUAL REPORT

OF THE

# SAGINAW & GRAND RAPIDS RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## GENERAL REMARKS.

This road was built as an extension of the Saginaw Valley & St. Louis Railroad from St. Louis to Alma, and is leased to that company, and with it is operated by the Detroit, Lansing & Northern R. R. Co.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* A. H. HARDY, Boston, Mass.
*Secretary and Treasurer,* CHAS. MERRIAM, Boston, Mass.

## DIRECTORS.

NATHANIEL THAYER, Boston, Mass.
H. H. HUNNEWELL, Boston, Mass.
GEORGE O. SHATTUCK, Boston, Mass.
JOHN A. BURNHAM, Boston, Mass.
B. S. ROTCH, Boston, Mass.
W. G. MEANS, Boston, Mass.
CHARLES L. YOUNG, Boston, Mass.
CHARLES MERRIAM, Boston, Mass.
ALPHEUS HARDY, Boston, Mass.
NATHANIEL THAYER, JR., Boston, Mass.
BROOKS ADAMS, Boston, Mass.
JAMES H. BLAKE, Boston, Mass.
WM. F. WILD, Boston, Mass.

Term expires July 12th, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 16 |
| Number of stockholders in Michigan at same date, - - | None. |
| Amount of full-paid stock held in Michigan at same date, - | None. |

Date of annual meeting of stockholders,—Second Wednesday in July.
Fiscal year of company ends December 31st.
General offices of the company are located at Detroit, Mich., and Boston, Mass.

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Capital stock authorized by charter or articles of association, | | $70,000 00 |
| Par value of shares, | $100 00 | |
| Average price received per share, | $100 00 | |
| Number of stockholders at date of last election, | 16 | |
| Number of stockholders in Michigan at same date, | None. | |
| Amount of full-paid stock held in Michigan, | Nothing. | |
| Capital stock issued [number of shares 700], amount paid in, | | 70,000 00 |
| Capital stock paid in, common, | | 70,000 00 |
| Capital stock, total amount paid in as per books of the company, | | 70,000 00 |
| Capital stock, total amount realized in cash, | 70,000 00 | |
| Capital stock paid in per mile of road owned by company, [3.60 miles], | | 19,444 44 |

## CONSTRUCTION AND EQUIPMENT ACCOUNTS.

### *Construction of Road.*

| | |
|---|---|
| Total expended for construction, | $70,000 00 |
| Average cost of construction per mile of road completed [3.60 miles], | 19,444 44 |

### *Cost of Equipment.*

Equipment supplied by Detroit, Lansing & Northern Railroad Company.

### *Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $70,000 00 |
| Average cost of same per mile, | 19,444 44 |
| Proportion of same for Michigan, | 70,000 00 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | |
|---|---|
| Construction account, | $70,000 00 |
| Total assets, | $70,000 00 |

LIABILITIES.

| | |
|---|---|
| Capital stock. - - - - - - - - - - - | $70,000 00 |
| Total liabilities, - - - - - - - - - - | $70,000 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF WAYNE, }

James E. Howard, Assistant Treasurer for the Saginaw Valley & St. Louis Railroad Company, lessee of the Saginaw & Grand Rapids Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed) J. E. HOWARD,

Subscribed and sworn to before me, this 21st day of July, A. D. 1882.

(L. S.) HENRY H. JAMES,
*Notary Public, Wayne Co.*

ANNUAL REPORT

OF THE

# DETROIT, MACKINAC & MARQUETTE RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## GENERAL REMARKS.

The main line of the road from Point St. Ignace to Marquette, 151.90 miles, was completed by the Construction Company, and turned over to the Railroad Company, December 31, 1881. The Branch from Junction to Sault Ste. Marie, 48 miles, is not yet built, but the stock and debit accounts cover the entire line.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES McMILLAN, Detroit.
*Vice President*, FRANCIS PALMS, Detroit.
*Secretary and Treasury*, HUGH McMILLAN, Detroit.
*General Superintendent*, THOS. McKEOWN, Marquette.
*Chief Engineer*, THOS. McKEOWN, Marquette.
*Auditor*, E. W. ALLEN, Marquette.
*General Passenger and Freight Agent*, FRANK MILLIGAN, Marquette.

## DIRECTORS.

JAMES McMILLAN, Detroit.
JNO. S. NEWBERRY, Detroit.
FRANCIS PALMS, Detroit.
FREDERICK E. DRIGGS, Detroit.
HUGH McMILLAN, Detroit.
GEO. HENDRIE, Detroit.
WM. B. MORAN, Detroit.
GEO. J. SENEY, New York city.

Term expires June 12, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 10 |
| Number of stockholders in Michigan at same date, | All. |

Amount of full-paid stock held in Michigan at same date, All.
Date of annual meeting of stockholders,—Second Tuesday in June.
Fiscal year of company ends December 31.
General offices of the company are located at Detroit, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $26,857 08 |
| Total expense, including taxes, | $20,998 03 | |
| Net income, | | $5,859 05 |
| Balance for the year, | | $5,859 05 |
| Balance (profit and loss) last year, | | 1,852 52 |
| Items not included in above, as follows: | | |
| Transportation account, | | 38 60 |
| Balance forward to next year, | $7,750 17 | |
| | $7,750 17 | $7,750 17 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $6,250,000 00 |
| Par value of shares, | $100 00 | |
| Amount issued, $6,250,000.00; shares, 62,500 | | |
| Amount paid in on common, | $6,250,000 00 | |
| Total amount paid in as per books of the company, | | 6,250,000 00 |
| Amount realized in property, | $6,250,000 00 | |
| Amount paid in per mile of road owned by company, | $31,250 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due October 1st, 1921, interest 6 per cent, payable April 1st, October 1st), | $3,000,000 00 |
| Income Bonds (due October 1st, 1921, interest 7 per cent, payable ——— ———), | 1,500,000 00 |
| Land Grant Bonds (due October 1st, 1911, interest 7 per cent, payable April 1st, October 1st), | 4,560,000 00 |
| Total amount of funded debt, | $9,060,000 00 |

| | | |
|---|---|---|
| Amount received from the same in property, | $9,060,000 00 | |
| Total debt liabilities, | | $9,060,000 00 |
| Amount of debt liabilities per mile of road [200 miles], | $45,300 00 | |

COST OF ROAD AND EQUIPMENT.*

| | |
|---|---|
| Total cost of road and equipment, | $12,041,982 01 |
| Average cost of same per mile, | 60,209 46 |
| Proportion of cost of road and equipment for Michigan, | 12,041,892 01 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, From through passengers, | $6,590 53 | |
| Total earnings, passenger department, | | $6,590 53 |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $19,656 85 | |
| Total earnings, freight department, | | $19,656 85 |
| Total transportation earnings, | | $26,247 38 |
| Earnings per mile of road operated [30 average miles], | $874 91 | |
| Proportion of earnings for Michigan, | 26,247 38 | |
| Income from all other sources, | | 609 70 |
| Total income from all sources, | | $26,857 08 |
| Proportion of income for Michigan, | 26,857 08 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $3,768 88 |
| Repairs of bridges, including culverts and cattle guards, | 300 35 |
| Total, | $4,069 23 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $517 81 |
| Repairs of freight cars, | 1,514 67 |
| Total, | $2,032 48 |

* This road was built by construction companies who received in payment therefor the stock and bonds of the Railroad Company.

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $2,508 50 |
| Oil and waste, | 691 07 |
| Locomotive service, | 2,660 59 |
| Passenger train service, | 857 85 |
| Freight train service, | 1,715 69 |
| Mileage of freight cars (debit balance), | 85 19 |
| Telegraph expenses (maintenance and operating), | 171 78 |
| Agents and station service, | 1,443 38 |
| Total, | $10,134 05 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $1,000 00 |
| Salaries of clerks in general offices, | 830 66 |
| Insurance, | 36 60 |
| Stationery and printing, | 1,069 45 |
| Contingencies, | 1,528 60 |
| Taxes in Michigan, | 296 96 |
| Total, | $4,762 27 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $4,069 23 |
| Maintenance of motive power and cars, | 2,032 48 |
| Conducting transportation, | 10,134 05 |
| General expenses, including taxes, | 4,762 27 |
| Total operating expenses and taxes, | $20,998 03 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road operated, | $699 99 | |
| Proportion of operating expenses and taxes for Michigan, | $20,998 03 | |
| Per centage of expenses to earnings, | 74 | |
| Net earnings per mile of road operated, 30 average miles, | 174 98 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, road and appurtenances, | | $12,041,892 01 |
| Cash items: | | |
| Cash, | $1,091,818 44 | |
| Bills receivable, | $35 00 | |
| Due from agents and companies, | 4,156 99 | |
| | | 1,096,010 43 |

| | | |
|---|---|---|
| Other assets: | | |
| Materials and supplies, | $21,291 62 | |
| Sault Ste. Marie & Marquette R. R. Co., | 2,220,000 00 | |
| | | 2,241,291 62 |
| Total assets, | | $15,379,194 06 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $6,250,000 00 |
| First Mortgage Bonds, | $3,000,000 00 | |
| Income Bonds, | 1,500,000 00 | |
| Land Grant Bonds, | 4,560,000 00 | |
| | | $15,310,000 00 |
| Unfunded debt: | | |
| Vouchers and accounts, | | $61,443 89 |
| Profit and loss, or income accounts, | | 7,750 17 |
| Total liabilities, | | $15,379,194 06 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Marquette to Glenwood (now Onota), October 1, 1880.
From Glenwood to St. Ignace, December 19, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths |
|---|---|---|
| Length completed in Michigan, | 151 90 | |
| Total length completed, | | 151 90 |
| Total length of road belonging to this company, | | 151 90 |
| Total length of road belonging to this company in Michigan, | 151 90 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 13 50 |
| Same in Michigan, | 13 50 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 165 40 |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 56 lbs., | | 127 00 |
| Total length of track laid with iron rails, weight per yard, 56 lbs., | | 38 40 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | |
|---|---|
| Name, description, and length of each: | |
| Marquette, Houghton & Ontonagon Railroad, operated jointly, | 2 00 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Total length of above roads, | | 2 00 |
| Total length of above roads in Michigan, | 2 00 | |
| Total miles of road operated by this company, | | 153 90 |
| *Total miles of road operated by this company in Michigan, | 153 90 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 9; aggregate length, feet, | 725 |
| Wooden trestles, | 28; aggregate length, feet, | 6,065 |
| Total, | 37 | 6,790 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 12 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 16 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 24 |
| Same in Michigan, | 24 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 10.75 |
| What is the average cost per rod? | $1 37½ | |
| The total cost of same? | $3,336 77 | |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | |
| In Marquette county, | | 14.50 |
| In Schoolcraft county, | | 63.75 |
| In Chippewa county, | | 48.00 |
| In Mackinac county, | | 26.25 |
| Total miles, | | 152.50 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 6 |
| Number of passenger cars—12-wheel, | 7 |
| Number express and baggage cars, | 2 |
| Number of box freight cars, | 50 |
| Number of platform cars, | 125 |

*From December 1st only, average for year 30 miles.

| | |
|---|---|
| Number of conductors' way cars, - - - - - - | 5 |
| Other cars as follows: | |
| Charcoal, 20; boarding cars, 4, - - - - - - | 24 |
| Number of locomotives equipped with train-brake, - - | 2 |
| Number of cars used in passenger trains equipped with train-brake, - - - - - - - - - - - - | 8 |
| What kind of train-brake is in use on your road? - - | Westinghouse Air. |
| Number of passenger train cars with Miller platform and buffer, | 9 |

## MILEAGE, TRAFFIC, ETC.

The road having been operated by the company only during month of December, the mileage and traffic accounts had not been opened at the end of the year.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

None upon the portion being operated.

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

I, Hugh McMillan, Secretary and Treasurer of the Detroit, Mackinac & Marquette Railroad Company, being duly sworn, depose and say that I have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of my knowledge and belief.

[L. S. OF R. R.] Signed, HUGH McMILLAN,
*Secretary and Treasurer D., M. & M. R. R. Co.*

Subscribed and sworn to before me, this 10th day of July, A. D. 1882.

[L. S.] EDWIN. A. WALLS,
*Notary Public, Wayne County, Mich.*

# ANNUAL REPORT

OF THE

# FLINT & PERE MARQUETTE RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JESSE HOYT, New York city.
*Vice President,* WM. W. CRAPO, New Bedford, Mass.
*Second Vice President, Treasurer, and General Manager,* H. C. POTTER, East Saginaw, Mich.
*Secretary,* H. C. POTTER, JR., East Saginaw, Mich.
*Assistant General Manager,* D. EDWARDS, East Saginaw, Mich.
*Superintendent,* SANFORD KEELER, East Saginaw, Mich.
*Division Superintendents,* W. F. POTTER, East Saginaw, Mich.; M. V. MERIDITH, East Saginaw, Mich.
*Chief Engineer,* WM. B. SEARS, East Saginaw, Mich.
*Superintendent of Telegraph,* ED. MILLER, East Saginaw, Mich.
*Auditor,* GILBERT W. LEDLIE, East Saginaw, Mich.
*General Passenger Agent, General Freight Agent,* D. EDWARDS, East Saginaw, Mich.
*Attorney,* WM. L. WEBBER, East Saginaw, Mich.

## DIRECTORS.

JESSE HOYT, New York city, N. Y.
WM. W. CRAPO, New Bedford, Mass.
LOUM SNOW, New Bedford, Mass.
FRANCIS HATHAWAY, New Bedford, Mass.
LEWIS PIERCE, Portland, Me.
ALFRED M. HOYT, New York city, N. Y.
C. D. WOOD, New York city, N. Y.
A. G. BROWER, Utica, N. Y,
H. C. POTTER, East Saginaw, Mich.
W. L. WEBBER, East Saginaw, Mich.
H. C. POTTER, JR., East Saginaw, Mich.

Term expires May 17, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 736 |
| Number of stockholders in Michigan at same date, | 13 |
| Amount of full-paid stock held in Michigan at same date, | $2,649 00 |

Date of annual meeting of stockholders,—third Wednesday in May.
Fiscal year of company ends December 31st.
General offices of the company are located at East Saginaw Mich.

## GENERAL EXHIBIT.

| | | Debit. | Credit. |
|---|---|---|---|
| Total income, | | | $1,864,526 30 |
| Total expense, including taxes, | | $1,315,322 19 | |
| Net income, | | | $549,204 11 |
| Interest on funded debt, | | 310,706 67 | |
| Interest on funded debt, | | 11,411 99 | |
| | | | 322,118 66 |
| Balance applicable to dividends, | | | $227,085 45 |
| Dividends declared (5½ per cent). | | $357,500 00 | |
| Balance for the year, | | $130,414 55 | |
| Balance (profit and loss) last year, | | | *132,585 69 |
| Items not included in above, as follows: | | | |
| Loss on cargo steamer St. Albans over insurance, | | $3,935 48 | |
| Dividends on securities owned by company, | 8,702 50 | | |
| Crapo & Prescott Trustees, | 9,000 00 | | |
| Insurance, losses paid in excess of premium, | 3,098 91 | | |
| Miscellaneous receipts, | 86 56 | | |
| | | | 20,887 97 |
| Balance forward to next year, | | 19,123 63 | |
| | | $153,473 66 | $153,473 66 |

| | |
|---|---|
| * Income account including income const. account, Dr. | $366,024 08 |
| Income account (operating alone), Cr. | 132,585 69 |
| Income account as shown last year's statement, Dr. | $233,438 39 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $6,500,000 00 |
| Par value of shares, | $100.00 | |
| Average price received per share, | $100.00 | |
| Amount issued, $6,500,000, No. of shares, 65,000 | | |
| Amount paid in on preferred, | $6,500,000 00 | |
| Total amount paid in as per books of the company, | | 6,500,000 00 |
| Amount realized in cash, | $6,500,000 00 | |
| Amount paid in per mile of road owned by company, | | 20,458 90 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds, Land Grants, interest 8 per cent, | $257,000 00 |
| Mortgage, 6 per cent, payable April and October, | 3,089,560 00 |
| Mortgage Bonds (due January 1st, 1901, interest 8 per cent, payable January and July), | 1,000,000 00 |
| Mortgage Bonds (due May 1st, 1888, interest 10 per cent, payable May and November), | 300,000 00 |
| Mortgage Bonds (due September 1, 1887, interest at 10 per cent, payable March and September), | 75,000 00 |
| Mortgage Bonds, due July 1st, 1882, interest 10 per cent, | 100,000 00 |
| Total amount of funded debt, | $4,821,560 00 |

### FLOATING DEBT.

| | | |
|---|---|---|
| Current credit balances, etc., | | 444,412 14 |
| Total debt liabilities, | | $5,265,972 14 |
| Amount of debt liabilities per mile of road [317.71 miles], | $16,574 77 | |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | 4,882,605 43 |

## COST OF ROAD AND EQUIPMENT.

Purchased at foreclosure sale, details cannot be given.

| | |
|---|---|
| Total cost of road and equipment, | $11,361,845 01 |
| Average cost of same per mile, | 35,761 68 |
| Proportion of cost of road and equipment for Michigan, | 11,361,845 01 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Branches, extension or alteration of road, specifying each: | |
| Crow Island Branch, | $16,340 67 |
| Saginaw and Mt. Pleasant Branch, | 3,875 01 |
| Saginaw & Clare county, | 29,109 93 |
| Otter Lake Branch, | 40,704 94 |
| Land, | 21,206 99 |
| Passenger and freight stations, wood-sheds, and water stations, | 65,432 91 |
| Engine-houses, car-sheds, and turn-tables, | 255 00 |
| New locomotives, | 109,039 90 |
| New snow plows, account of, | 55 78 |
| New passenger cars, | 89,055 15 |
| New dump, boarding, hand and lorrie cars, | 3,073 99 |
| New freight cars, | 297,104 32 |
| Machine-shops, machinery and tools, | 41,768 97 |
| Any other expenditures charged to property account (specifying the same): | |
| Improvements in East Saginaw and Averill yards, | 7,926 90 |
| Docks at Ludington and Bay City, | 2,633 43 |
| Dry Kiln, East Saginaw, | 2,368 76 |
| Scales, Reed City, | 800 48 |
| Steam excavator, | 6,355 53 |
| Sundry small items, | 1,534 53 |
| Engineering, | 1,287 40 |
| Total charges to property account during the year, | $739,930 39 |
| Property sold and credited property account during year (specifying same): | |
| Buildings sold, | 1,440 00 |
| | $738,490 39 |
| For coupons funded, and interest on same, reorganization expenses, etc., | 951,395 72 |
| Net addition to property account for the year, | $1,689,886 11 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $653,078 46 | |
| From through passengers, | 2,399 63 | |
| From express and baggage, | 15,405 71 | |
| From mails, | 28,283 63 | |
| Total earnings, passenger department, | | $699,167 43 |

Earnings per train mile run [543,566 miles], . $1.28.6

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $1,147,662 68 | |
| From through traffic, | 9,704 56 | |
| From other sources, freight department, | None. | |
| Total earnings, freight department, | | $1,157,367 34 |
| Earnings per train mile run [719,438 miles], | $1.60.8 | |
| Total transportation earnings, | | $1,856,534 77 |
| Earnings per mile of road operated [317.71 miles], | $5,843 48 | |
| Earnings per train mile run, from all trains earning revenue [1,263,004 miles], | $1.46.9 | |
| Proportion of earnings for Michigan, | $1,856,534 77 | |
| Income from all other sources: | | |
| Hire of cars, | 7,704 53 | |
| Miscellaneous, | 287 00 | |
| | | 7,991 53 |
| Total income from all sources, | | $1,864,526 30 |
| Proportion of income for Michigan, | 1,864,526 30 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, Renewal of rails, Renewal of ties, | $351,838 41 |
| Repairs of bridges, including culverts and cattle guards, | 10,324 98 |
| Repairs of fences, road-crossings, and signs, | 12,390 86 |
| Repairs of buildings, | 25,506 13 |
| Total, | $400,060 38 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $68,394 22 |
| Repairs of passenger cars, | 47,701 38 |
| Repairs of freight cars, | 56,498 96 |
| Total, | $172,594 56 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $174,734 67 |
| Water-supply, | 12,615 21 |
| Oil and waste, | 19,339 05 |
| Locomotive service, | 106,949 65 |

| | |
|---|---|
| Passenger train service, | $41,783 90 |
| Passenger train supplies, | 3,275 11 |
| Freight train service, | 55,387 95 |
| Freight train supplies, | 4,341 42 |
| Damage and loss of freight and baggage, | 495 34 |
| Damages to property and cattle, | 3,887 38 |
| Personal injuries, | 1,287 93 |
| Agents and station service, | 144,911 05 |
| Station supplies, | 4,304 38 |
| Total, | $573,312 99 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $29,000 00 |
| Salaries of clerks in general offices, | 47,074 37 |
| Law expenses, | 2,348 02 |
| Track rental, | 10,071 07 |
| Stationery and printing, | 9,321 92 |
| Outside agencies and advertising, | 6,063 83 |
| Contingencies, | 23,879 93 |
| Taxes in Michigan, | 41,595 12 |
| Total, | $169,354 26 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $400,060 38 |
| Maintenance of motive power and cars, | 172,594 56 |
| Conducting transportation, | 573,312 99 |
| General expenses, including taxes, | 169,354 26 |
| Total operating expenses and taxes, | $1,315,322 19 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 317.71 miles, | $4,140 00 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [1,263,004 miles], | $1 04.1 | |
| Proportion of operating expenses and taxes for Michigan, | $1,315,322 19 | |
| Per centage of expenses to earnings, | 70.85 | |
| Net earnings per mile of road, 317.71 miles, | $1,703 48 | |
| Net earnings per train mile, | $0 42.85 | |

## ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $11,361,845 01 |
| Equipment account, | |

| | | | |
|---|---|---|---|
| Other investments (specifying same): | | | |
| Stock in Manistee R. R., | | $368,641 30 | |
| Stock in F. & P. M. R. R., | | 158,000 00 | |
| Detroit dry-dock account, lake steamers, | | 10,000 00 | |
| | | | 11,898,486 31 |
| Cash items: | | | |
| Cash, | | $47,204 24 | |
| Due from agents and companies, | | 37,235 39 | |
| | | | 84,439 63 |
| Other assets: | | | |
| Materials and supplies, | | $217,776 70 | |
| Debit balances, | | 46,017 13 | |
| Receiver's balances, | | 9,101 80 | |
| W. L. Webber, trustee, | | 21,291 45 | |
| Uncollected dividends securities belonging company, | | 4,740 00 | |
| | | | $298,927 08 |
| Total assets, | | | $12,281,853 02 |

LIABILITIES.

| | | | |
|---|---|---|---|
| Capital stock, | | | $6,500,000 00 |
| Funded debt: | | | |
| Holly, Wayne & Monroe R. R. bonds, | | 1,000,000 00 | |
| Bay City & East Saginaw bonds, | | 100,000 00 | |
| Bay county bonds, | | 75,000 00 | |
| Flint & Holly R. R. lease bonds, | | 30,000 00 | |
| First mortgage land grant, 8 per cent bonds, | | 257,000 00 | |
| F. & P. M. R. R. 6s, 1920, | | 3,088,000 00 | |
| F. & P. M, R. R. certificates, | | 1,560 00 | |
| | | | 11,321,560 00 |
| Unfunded debt: | | | |
| Interest unpaid, | | $53,945 00 | |
| Dividends unpaid, | | 195,000 00 | |
| Vouchers and accounts, | | 143,594 49 | |
| Other liabilities: | | | |
| W. L. Webber, Land Commissioner, | | 14,735 72 | |
| Treasurer State of Michigan, | | 37,136 93 | |
| Premium on bonds, | $107,757 25 | | |
| Avails land sales to cancel bonds, | 389,000 00 | | |
| | | 496,757 25 | |
| | | | 941,169 39 |
| Profit and loss, or income accounts | | | 19,123 63 |
| Total liabilities, | | | $12,281,853 02 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Monroe to Ludington, and branches, December 1, 1874.
From Otter Lake to Fostoria, December 19, 1881.
From Webber to Manistee, December 31st, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, Monroe to Ludington, | 253 31 | |
| Total length completed, | | 253 31 |

BRANCHES.

| | | |
|---|---|---|
| Mt. Pleasant Branch from Coleman to Mt. Pleasant, | 15 02 | |
| Bay City Branch, from East Saginaw to Bay City, | 12 35 | |
| St. Clair Branch, from St. Clair Junction to South Saginaw, | 3 94 | |
| Flint River Branch, from Otter Lake Junction to Fostoria, | 19 51 | |
| Saignaw and Clare County Branch, from Harrison Junction to Harrison, | 15 50 | |
| Butters Branch, from Butters Junction to Peltman, | 3 18 | |
| Total length of branches owned by company, | | 69 50 |
| Total length of branches owned by company in Michigan, | 69 50 | |
| Total length of road belonging to this company, | | 322 81 |
| Total length of road belonging to this company in Michigan, | 322 81 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 111 29 |
| Same in Michigan, | 111 29 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 434 10 |
| Same in Michigan, | 434 10 | |
| Gauge of track, 4 feet, 8½ inches, except 15.02 miles—3 feet. | | |
| Total length of tracks laid with steel rails, weight per yard, 56 to 35 lbs., | | 283 44 |
| Total length of tracks laid with iron rails, weight per yard, 56 and 60 lbs. | | 61 75 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Name, description, and length of each: | | |
| Manistee Railroad (includes "Butters Branch"), | 25 53 | |
| Total length of above roads, | | 25 53 |
| Total length of above roads in Michigan, | 25 53 | |
| Total miles of road operated by this company, | | 348 34 |
| Total miles of road operated by this company in Michigan, | 348 34 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 23; aggregate length, feet, | 2,454 |
| Iron and wood combination, No. of, | 6; aggregate length, feet, | 560 |
| Wooden trestles, | 86; aggregate length, feet, | 16,021 |
| Total, | 115 | 19,035 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 337 |
| Stone, number, | 1 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 478 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
G. R. & I. R. R., at Reed City.
J. L. & S. R. R., at East Saginaw.
Detroit & Bay City R. R., at Bay City and Otter Lake.
Chicago & Grand Trunk R. R., at Flint.

What railroads cross your road either over or under your grade in this State, and where?
Detroit, Grand Haven & Milwaukee R. R., at Holly.
Detroit, Lansing & Northern R. R., at Plymouth.
Michigan Central R. R., at Wayne.
Detroit, Butler & St. Louis R. R., at Romulus.
Lake Shore & Michigan Southern R. R., at Carlton.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 378 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 7 |
| Number of crossings of highways over railroad, | 2 |
| Number of crossings of highways under railroad, | 6 |
| Number of highway bridges less than 18 feet above track, | 2 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 75 |
| Same in Michigan, | 75 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 1,726 |
| Same in Michigan, | 1,726 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 457.38 |
| What is the average cost per rod? | $1 00 |
| The total cost of same? | $45,738 00 |
| How many miles of new fencing have you built during the year? | 17.36 |

Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road:

| | |
|---|---|
| In Lapeer county, | 3.00 |
| In Isabella county, | 8.00 |
| In Clare county, | 28.00 |
| In Osceola county, | 12.50 |
| In Lake county, | 18.00 |
| In Mason county, | 34.00 |
| In Manistee county, | 9.00 |
| Total miles, | 112.50 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 68 |
| Average length of sections, | 5 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 191,863 |
| Number of new ties put in track in Michigan, | 191,863 |
| Average number of new ties per mile of road, | 634 |
| New rails put in track: | |
| Steel [tons 4,000], miles, | 45.45 |
| Total miles of track laid with new rails, | 45.45 |

Between what points were new rails laid:

Chase and Ludington.
Wayne and Monroe.
Evart and Hersey.
East Saginaw and Bay City.

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 211,142 |
| Timber culverts replaced with sewer pipe—number, | 5 |
| Timber culverts and cattle-guards replaced with timber,—[number, 49], timber used (feet B. M.), | 148,893 |

New bridges built during the year,—number:

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| East Saginaw | 130 feet Howe Truss | Wood | September | 130 |
| Rose Centre | Pile | Wood | July | 156 |
| Birch Run | Trestle | Wood | October | 48 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 46 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 13 |

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 3 |
| Number of passenger cars—8-wheel, | 53 |
| Number of express and baggage cars,—mail, | 15 |
| Number of box freight cars, | 754 |
| Number of stock cars, | 8 |
| Number of platform cars, | 967 |
| Number of conductors' way cars, | 6 |
| Other cars as follows: Cabin, 20; hand, 85; lorrie, 75; boarding, 11; tool, 1; snow plow, 2; derrick, 1; pile driver, 1; excavator, 2, | 198 |
| Number of locomotives equipped with train-brake, | 20 |
| Number of cars used in passenger trains equipped with train-brake. | 68 |
| What kind of train-brake is in use on your road? Westinghouse and Eams's Vacuum. | |
| Number of passenger train cars with Miller platform and buffer, | 67 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 543,566 |
| Miles run by freight trains during the year, | 719,438 |
| Total mileage of trains earning revenue, | 1,263,004 |
| Miles run by work trains during the year, | 164,710 |
| Miles run by switching trains, | 519,060 |
| Total train mileage, | 1,946,774 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 4 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 152 |
| Average number of cars in freight trains, | 24 |
| Average weight of freight trains, exclusive of freight,—tons, | 290 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 892 | | |
| Number of local passengers carried, | 812,239 | | |
| Total number of passengers carried, | 813,131 | | |
| Total passenger mileage, or passengers carried one mile, | | 24,449,195 | |
| Average distance traveled by each passenger, | | 30 | |

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Average amount received from each passenger, | | | $0.80.6 |
| Highest rate of fare per mile, for any distance, | | | $0.05 |
| Lowest rate of fare per mile, for any distance, | | | 0.01.1 |
| Average rate of fare per mile, for through passengers, | | | 0.01.1 |
| Average rate of fare per mile, for local passengers, | | | 0.02.6 |
| Average rate of fare per mile, for all passengers, | | | 0.02.6 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | 10,906 | | |
| Number of tons of local freight carried, | 1,003,059 | | |
| Total tons of freight carried, | 1,013,965 | | |
| Total mileage of through freight, | | 2,055,227 | |
| Total mileage of local freight, | | 78,838,825 | |
| Total freight mileage, or tons carried one mile, | | 80,894,052 | |
| Average ton haul for through freight, | | 188 | |
| Average ton haul for local freight, | | 78 | |
| Average ton haul for all freight, | | 80 | |
| Average amount received for each ton haul, | | | $1.14.5 |
| Average rate per ton per mile, received for through freight, | | | |
| Average rate per ton per mile, received for local freight, | | | 0.01.45 |
| Average rate per ton per mile, received for all freight, | | | 0.01.43 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 38,648 | 3.81 |
| Flour, | 12,667 | 1.25 |
| Animals, | 6,131 | .60 |
| Other agricultural products, | 33,221 | 3.28 |
| Lumber and forest products, | 651,757 | 64.28 |
| Coal, | 27,912 | 2.75 |
| Plaster, | 1,614 | .16 |
| Salt, | 72,397 | 7.14 |
| Manufactures,—articles shipped from point of production, | 11,812 | 1.16 |
| Merchandise and other articles not enumerated above, | 157,806 | 15.57 |
| Total tons carried, | 1,013,965 | 100. |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American. Rate once and one-half first class.
Express company delivers and handles its own freight at depots.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Canada Southern Line, Buffalo, N. Y., F. & P. M. cars in line.
Commercial Express Line, Buffalo, N. Y., F. & P. M. cars in line.
Erie & North Shore Despatch, Detroit, Mich., F. & P. M. cars in line.
Great Eastern Line, Montreal, Ont., F. & P. M. cars in line.
Blue Line, Rochester, N. Y.
Great Western Despatch, Indianapolis, Ind.
Empire Line, Cleveland. O.
South Shore Line, New York, N. Y.
Hoosac Tunnel Line, Rochester, N. Y.
Merchants' Despatch, New York, N. Y.
National Despatch, St. Albans, Vt.
Red Line, Buffalo, N. Y.
Standard Oil Company, Cleveland, O.
Union Line, Pittsburg, Pa.
White Line, Buffalo, N. Y.

All above lines, except Empire, Merchants' Despatch, Great Western Despatch, and Standard Oil Company, are operated by R. R. companies, who own the rolling stock jointly, and share the results of operation. These 4 are corporate companies, owning their own cars, on which they receive mileage. No preferences given. The Standard Oil Company's cars are tank cars.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Commercial Express, | $1,047 68 |
| Empire Line, | 687 62 |
| Erie & Pacific Despatch, | 30 17 |
| Merchants Despatch, | 721 57 |
| National Despatch, | 247 28 |
| Standard Oil Company, | 137 90 |
| Union Line, | 110 91 |
| White Line, | 10 83 |
| | $2,973 96 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

The sleeping and Parlor cars run upon this road are owned by this company. Charges in addition to regular passenger rates are—

Sleeper, $1.00 for double berth.

Parlor, 25c., for any distance.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

| | |
|---|---|
| 82½ miles @ . . . . . | $112.54 per mile. |
| 168.21 miles @ . . . . . | 90.03 per mile. |
| 12.75 miles @ . . . . . | 67.55 per mile. |
| 52.72 miles @ . . . . . | 42.75 per mile. |

*Telegraph.*

Number of miles of telegraph owned by company, . . None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Western Union Telegraph Company, 610 miles of wire.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

March 2. Jno. Nohr, brakeman, Harrison Junction, fell from log train; company not responsible.

March 26. Rev. Father Galesea, Flint, boarding moving train, drunk; company not responsible.

May 1. Joe Smith, Harrison Branch, fell from log train; company not responsible.

May 2. Frank Hassell, conductor, Farwell, fell from pilot of locomotive; company not responsible.

June 30. Abner Betoton, baggageman, Bay City, fell from baggage car; company not responsible.

July 4. James Lynch, Belden, trespasser, drunk; company not responsible.

August 30. Unknown, East Saginaw, trespasser, drunk; company not responsible.

September 12. E. Herrick, brakeman, Midland, coupling; company not responsible.

September 12. Adelbert Brandt, boy, Tallman, asleep under car; company not responsible.

November 1. V. Lewis, Baldwin, trespasser, ran in front of train; company not responsible.

November 28. Gus. Mobee, Nirvana, trespasser, ran in front of train; company not responsible.

December 25. Jno. Biddle, switchman, East Saginaw, coupling.

INJURED.

January 7. Wm. Phillipson, switchman, East Saginaw, coupling; carelessness.
January 14. Geo. Williams, conductor, Harrison, coupling.
January 23. Jno. Garvin, Clare, trespasser.
January 27. Jno. Stinker, yardman, East Saginaw, on track; lack of caution.
February 11. Wm. Little, East Saginaw, trespasser.
February 21. E. A. Broadwell, brakeman, Midland, coupling.
March 15. E. Mosher, brakeman, East Saginaw, coupling.
March 7. Chas. Masacar, brakeman, Grand Blanc, coupling.
April 6. Gilbert Curry, Smith's Crossing, trespasser.
April 28. Flint Divine, waterboy, Harrison Branch, boarding moving car.
May 4. Jas. Moore, passenger, Wayne, jumped from train.
May 20. E. Littlefield, fireman, Northville, excavator machinery.
May 19. P. O'Driscoll, flagman, East Saginaw, highway.
May 25. Jno. Wesley, New Boston, trespasser.
June 19. Wm. Stone, laborer, Mt. Morris, gravel bank caved.
June 20. Ed. Young, brakeman, Chase, coupling.
July 8. Thos. Plues, conductor, Freeland, jumped from caboose.
July 19. Isaac Gould, brakeman, Wayne, coupling.
July 25. Louis Harsh, brakeman, Freeland, coupling.
August 6. Carl Shultz, trackman, Welden Creek, stepped on rail in front of car.
August 11. Chas. Maltz, boy, Waltz, riding on freight car.
August 11. Wm. Gunderman, brakeman, Harrison Branch, jumped from car.
September 1. Wm. Samis, brakeman, Bay City, knocking stakes from car.
August 29. Frank Hopkins, brakeman, East Saginaw, boarding moving car.
September 20. Jas. McLaughlin, Clare, boarding moving train.
October 11. H. Hamilton, engineer, Harrison, stepping from engine.
October 11. Chas. Light, brakeman, Midland, coupling.
October 15. Sam Van Horn, brakeman, Chippewa, coupling.
October 21. Chas. Stillwagan, brakeman, Reed City, coupling.
Octobe. 21. Wm. Flunder, brakeman, East Saginaw, coupling.
November 2. Sam Stoddard, brakeman, East Saginaw, coupling.
November 9. Wm. Cassiday, brakeman, Wayne, caught foot in frog.
November 10. Albert Parker, pony conductor, East Saginaw, wheels falling from car.
November 11. Myron Cole, boy, Harrison Branch, riding on flat car and fell.
November 15. —— Brock, boy, Toledo, trespasser, crossing in front train.
November 22. W. Ramsey, brakeman, Warner, coupling.
December 6. Elmer Moore, brakeman, Flint, coupling.
December 6. Ira McDonald, brakeman, Highland, coupling.
December 19. W. H. Brower, brakeman, New Boston, coupling.

## TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | 2 | | | 17 | |
| Derailments | | | | | | |
| Falling from trains | | 8 | 1 | | 1 | |
| Frogs | | | | | 1 | |
| Getting on and off trains | 1 | | | 2 | 4 | |
| Highway crossings | | | | | | |
| Miscellaneous | | | 2 | | 7 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | 2 |
| Trespassers | | | 3 | | | 5 |
| Total | 1 | 5 | 6 | 2 | 30 | 7 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 12 |
| Same in Michigan, | 12 |
| Number of persons injured during the year on the entire line, | 39 |
| Same in Michigan, | 38 |
| Number of casualties purely accidental in Michigan, | 1 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 37 |
| Persons killed or injured in Michigan while intoxicated, | 5 |
| Trespassers and tramps killed or injured in Michigan, | 5 |
| Suicides in Michigan, | 0 |

STATE OF MICHIGAN, }
COUNTY OF SAGINAW, } ss.

Henry C. Potter, General Manager, and Gilbert W. Ledlie, Auditor, of the Flint & Pere Marquette Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, HENRY C. POTTER,
GILBELT W. LEDLIE.

Subscribed and sworn to before me, this 8th day of May, A. D. 1882.

[L. S.] ALFRED W. NEWTON,
*Notary Public in and for Saginaw county, Michigan.*

# ANNUAL REPORT

OF THE

# MANISTEE RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

This road is rented and operated by the Flint & Pere Marquette R. R. Co., and its operating accounts are included with the report of that corporation.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* HENRY C. POTTER, East Saginaw, Mich.
*Vice President,* WM. L. WEBBER, East Saginaw, Mich.
*Secretary,* / *Treasurer,* } H. C. POTTER, JR., East Saginaw, Mich.

## DIRECTORS.

JESSE HOYT, New York city, N. Y.
WM. W. CRAPO, New Bedford, Mass.
HENRY C. POTTER, East Saginaw, Mich.
WM. L. WEBBER, East Saginaw, Mich.
H. C. POTTER, JR., East Saginaw, Mich.

Term expires first Wednesday in June.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 5 |
| Number of stockholders in Michigan at same date, - - | 3 |
| Amount of full-paid stock held in Michigan at same date, - | |

Date of annual meeting of stockholders,—First Wednesday in June.
Fiscal year of company ends December 31st.
General offices of the company are located at East Saginaw, Mich.

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $400,000 00 |
| Par value of shares, | $100 00 | | |
| Amount paid in on common, | | $368,605 31 | |
| Total amount paid in as per books of the company, | | | 368,605 31 |
| Amount realized in cash, | | $368,605 31 | |
| Amount paid in per mile of road owned by company, 25.53 miles, | | | 14,438 00 |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Grading and masonry, | $115,095 12 |
| Bridging, | 38,295 50 |
| Superstructure, including rails, | 197,354 59 |
| Land, land damages, and fences, | 5,220 98 |
| Passenger and freight stations, wood-sheds, and water stations, | 772 42 |
| Engine-houses, car-sheds, and turn-tables, | 1,426 04 |
| Engineering, agencies, salaries, and other expenses during construction, | 7,722 92 |
| All other items charged to construction not enumerated above, | 1,181 50 |
| Total expended for construction, | $367,069 07 |
| Average cost of construction per mile of road not including sidings, [25.53 miles], | 14,377 95 |
| Proportion of cost of construction for Michigan, | 367,069 07 |

*Cost of Equipment.*

Furnished by the Flint & Pere Marquette R. R. Co.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $367,069 07 |
| Average cost of same per mile, | 14,377 95 |
| Proportion of cost of road and equipment for Michigan, | 367,069 07 |

## ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | $367,069 07 | $367,069 07 |
| Cash items: | | |
| Cash, | $1,536 24 | $1,536 24 |
| Total assets, | | $368,605 31 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock. - - - - - - - | $368,605 31 | |
| | | $368,605 31 |
| Total liabilities, - - - - - - - - - - | | $368,605 31 |

STATE OF MICHIGAN, }
COUNTY OF SAGINAW, } ss.

Henry C. Potter, President, and H, C. Potter, Jr., Treasurer, of the Manistee Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), HENRY C. POTTER,
H. C. POTTER, JR.

Subscribed and sworn to before me, this 8th day of May, A. D. 1882.

[L. S.] ALFRED W. NEWTON,
*Notary Public in and for Saginaw county, Michigan.*

# ANNUAL REPORT

OF THE

# SAGINAW & CLARE COUNTY RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## GENERAL REMARKS.

The stock of this Road is owned by the Flint & Pere Marquette R. R. Company, by whom it is operated, and its operating accounts are included with those of the latter corporation.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JESSE HOYT, New York city.
*Secretary*, WM, L. WEBBER, East Saginaw.
*Treasurer*, H. C. POTTER, East Saginaw.

## DIRECTORS.

JESSE HOYT, New York city.
WM. W. CRAPO, New Bedford, Mass.
HENRY C. POTTER, East Saginaw, Mich.
WM. L. WEBBER, East Saginaw, Mich.
SANFORD KEELER, East Saginaw, Mich.

Term expires first Wednesday in June.

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## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $160,000 00 |
| Par value of shares, | $100 00 | | |
| Amount paid in on shares not issued, | | $1,035 00 | |
| Total amount paid in as per books of the company, | | | 1,035 00 |

| | |
|---|---|
| Amount paid in per mile of road owned by company, 15.50 miles, | 66 78 |

## ANALYSIS OF DEBT ACCOUNTS.

### FLOATING DEBT.

| | |
|---|---|
| Incurred for construction, | $141,281 38 |
| Total debt liabilities, | $141,281 38 |
| Amount of debt liabilities per mile of road [15.50 miles], | 911 50 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, | $142,316 38 |
| Average cost of same per mile, | 9,181 70 |
| Proportion of cost of road and equipment for Michigan, | 142,316 38 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension or alteration of road, | $27,743 66 |
| Passenger and freight stations, wood-sheds, and water stations, | 1,366 27 |
| Total charges to property account during the year, | $29,109 93 |
| Net addition to property account for the year, | $29,109 93 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | $142,316 38 | $142,316 38 |
| Total assets, | | $142,316 38 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | $1,035 00 | $1,035 00 |
| Unfunded debt: | | |
| Vouchers and accounts, | | 141,281 38 |
| Total liabilities, | | $142,316 38 |

STATE OF MICHIGAN, }
COUNTY OF SAGINAW, } ss.

Henry C. Potter, Treasurer of the Saginaw & Clare County Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), HENRY C. POTTER,

Subscribed and sworn to before me, this 8th day of May A. D. 1882.

[L. S.] ALFRED W. NEWTON,
*Notary Public in and for Saginaw county, Mich.*

# ANNUAL REPORT

OF THE

# SAGINAW AND MT. PLEASANT RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

This road is owned by the Flint & Pere Marquette Railroad Company by whom it is operated, and its operating accounts are included with those of the latter corporation.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JESSE HOYT, New York city.
*Vice President,* ISAAC A. FANCHER, Mt. Pleasant.
*Secretary and Treasurer,* WM. L. WEBBER, East Saginaw.

## DIRECTORS.

JESSE HOYT, New York city.
HENRY C. POTTER, East Saginaw.
SANFORD KEELER, East Saginaw.
WM. L. WEBBER, East Saginaw.
ISAAC A. FANCHER, Mt. Pleasant,
DOUGLAS H. NELSON, Mt. Pleasant.
GEORGE L. GRANGER, Mt. Pleasant.

Term expires the 1st Wednesday in June, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 9 |
| Number of stockholders in Michigan at same date, | 8 |
| Amount of full-paid stock held in Michigan at same date, | — |

Date of annual meeting of stockholders,—first Wednesday in June.
Fiscal year of company ends December 31st.
General offices of the company are located at East Saginaw.

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $100,000 00 |
| Par value of shares, | $100 00 | |
| Total amount paid in as per books of the Company, | | $40,501 96 |
| Amount realized in cash, | $40,501 96 | |
| Amount paid in per mile of road owned by company, | $2,696 53 | |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not Reported Separately), Built by Company.*

| | |
|---|---|
| Grading and masonry, | 19,754 46 |
| Bridging, | 8,353 48 |
| Superstructure, including rails, | 72,773 13 |
| Land, land damages, and fences, | 659 10 |
| Passenger and freight stations, wood-sheds and water stations, | 3,084 96 |
| Engine-houses, car-sheds, and turn-tables, | 47 63 |
| Interest paid during construction, discount, etc., | 1,103 84 |
| Engineering, agencies, salaries, and other expenses during construction, | 2,773 82 |
| All other items charged to construction not enumerated above, | 1,695 28 |
| Total expended for construction, | $110,245 70 |
| Average cost of construction per mile of road (not including sidings), [15.02 miles], | 7,339 93 |
| Proportion of cost of construction for Michigan, | 110,245 70 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $8,111 61 |
| Passenger, mail, and baggage cars, | 5,488 27 |
| Freight and other cars, | 6,784 34 |
| Total for equipment, | $20,384 22 |
| Average cost of equipment per mile of road operated by company [15.02 miles], | 1,357 14 |
| Proportion of cost of equipment for Michigan, | 20,384 22 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $130,629 92 |
| Average cost of same per mile, | 8,697 07 |
| Proportion of cost of road and equipment for Michigan, | 130,629 92 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Grading and ditching, | $557 00 |
| Total charges to property account during the year, | $557 00 |
| Net addition to property account for the year, | $557 00 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | $110,245 70 | |
| Equipment account, | 20,384 22 | |
| | | 130,629 92 |
| Total assets, | | $130,629 92 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | 40,501 96 | |
| | | $40,501 96 |
| Unfunded debt: | | |
| Vouchers and accounts, | | 90,127 96 |
| Total liabilities, | | $130,629 92 |

## DESCRIPTION OF ROAD.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 15 02 | |
| Total length completed, | | 15 02 |
| Total length of road belonging to this company, | | 15 02 |
| Total length of road belonging to this company in Michigan, | 15 02 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 97 |
| Same in Michigan, | 97 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 15 99 |
| Same in Michigan, | 15 99 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 35 lbs., | 14 40 | |
| Total length of tracks laid with iron rails, weight per yard, 35 lbs., | | 1 59 |
| Total miles of road operated by this company, | | 15 02 |
| Total miles of road operated by this company in Michigan, | 15 02 | |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 2 |
| Number of passenger cars—8-wheel, | 2 |
| Number of express and baggage cars, | 1 |
| Number of box freight cars, | 10 |
| Number of platform cars, | 15 |
| Number of locomotives equipped with train-brake, | 2 |
| Number of cars used in passenger trains equipped with train-brake, | 2 |
| What kind of train-brake is in use on your road? | Eames' Vacuum. |

STATE OF MICHIGAN, }
COUNTY OF SAGINAW, } ss.

Henry C. Potter, General Manager of the Flint & Pere Marquette R. R., owner of Saginaw & Mt. Pleasant Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed) HENRY C. POTTER,

Subscribed and sworn to before me, this 10th day of June, A. D. 1882.

(L. S.) ALFRED W. NEWTON,
*Notary Public in and for Saginaw county, Mich.*

# ANNUAL REPORT

OF THE

# FORT WAYNE & JACKSON RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* SAMUEL SLOAN, New York city.
*Secretary and Treasurer,* R. G. ROLSTON, New York city.
*General Superintendent,* M. D. WOODFORD, Jackson, Mich.
*Cashier,* E. B. DEYOE, Jackson, Mich.
*Accountant,* J. C. WEBB, Jackson, Mich.
*General Passenger and Freight Agent,* H. BROMLEY, Jackson, Mich.
*Attorney,* EUGENE PRINGLE, Jackson, Mich.

## DIRECTORS.

SAMUEL SLOAN, New York.
MOSES TAYLOR, New York.
WILLIAM E. DODGE, New York.
WILLIAM H. HAYS, New York.
PERCY R. PYNE, New York.
ROSWELL G. RALSTON, New York.
JAMES F. JOY, Detroit, Mich.
AMOS ROOT, Jackson, Mich.
EBENEZER O. GROSVENOR, Jonesville, Mich.

Term expires January 28th, 1883.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 194 |
| Number of stockholders in Michigan at same date, - - | 8 |
| Amount of full-paid stock held in Michigan at same date, | 1,927 shares. |

Date of annual meeting of stockholders,—January 28th.
Fiscal year of company ends December 31.
General offices of the company are located at Jackson, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $295,910 79 |
| Total expense, including taxes, | $230,225 54 | |
| Net income, | | $65,685 25 |
| Balance applicable to dividends, | | $65,685 25 |
| Dividends declared (2½ per cent), | 58,479 00 | |
| Balance for the year, | | $7,206 25 |
| Balance (profit and loss) last year, | 164 07 | |
| Balance forward to next year, | 7,042 18 | |
| | $7,206 25 | $7,206 25 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $3,000,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $2,719,579.53; shares, 27,195 | | | |
| Amount paid in on common, | | $431,747 44 | |
| Amount paid in on preferred, | | 2,287,832 09 | |
| Total amount paid in as per books of the company, | | | 2,719,579 53 |
| Amount realized in cash, | | $2,719,579 53 | |
| Amount paid in per mile of road owned by company, | | $27,195 79 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FLOATING DEBT.

| | | |
|---|---|---|
| Vouchers and accounts, | | 49,418 58 |
| Total debt liabilities, | | $49,418 58 |
| Amount of debt liabilities per mile of road [100 miles], | $494 18 | |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, | $2,719,579 53 |
| Average cost of same per mile, | 27,195 79 |
| Proportion of cost of road and equipment for Michigan, | 1,251,006 58 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | 72,832 22 | |
| From through passengers, | 17,250 84 | |
| From express and baggage, | 4,904 23 | |
| From mails, | 5,427 00 | |
| Total earnings, passenger department, | | $100,414 29 |
| Earnings per train mile run [126,872 miles], | $0.79 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $75,190 90 | |
| From through traffic, | 112,786 35 | |
| Total earnings, freight department, | | $187,977 25 |
| Earnings per train mile run [133,622 miles], | $1 40 | |
| Total transportation earnings, | | $288,391 54 |
| Earnings per mile of road operated [100 miles], | $2,883 92 | |
| Earnings per train mile run, from all trains earning revenue [260,494 miles], | 1 11 | |
| Proportion of earnings for Michigan, | 132,660 11 | |
| Rents for use of road, stations, etc., | 1,700 00 | |
| Income from all other sources, | 5,819 25 | |
| | | $7,519 25 |
| Total income from all sources, | | $295,910 79 |
| Proportion of income for Michigan, | 136,118 96 | |

### EXPENSES.

#### CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $29,726 56 |
| Renewal of rails, | 23,150 48 |
| Renewal of ties, | 7,660 84 |
| Repairs of bridges, including culverts and cattle guards, | 696 22 |
| Repairs of fences, road-crossings, and signs, | 1,570 99 |
| Repairs of buildings, | 820 96 |
| Total, | $63,626 05 |

#### CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $12,370 46 |
| Repairs of passenger cars, | 3,244 64 |
| Repairs of freight cars (including cost of 50 new box cars), | 38,831 70 |
| Total, | $54,446 80 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $24,334 85 |
| Water-supply, | 1,950 88 |
| Oil and waste, | 2,757 78 |
| Locomotive service, | 13,848 98 |
| Passenger train service, | 6,209 56 |
| Passenger train supplies, | 204 05 |
| Freight train service, | 6,729 04 |
| Freight train supplies, | 221 06 |
| Telegraph expenses (maintenance and operating), | 3,205 93 |
| Damage and loss of freight and baggage, | 456 12 |
| Damages to property and cattle, | 147 50 |
| Agents and station service, | 19,847 02 |
| Station supplies, | 828 01 |
| Total, | $79,838 78 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $12,858 19 |
| Salaries of clerks in general offices, | | 4,751 93 |
| Law expenses, | | 231 08 |
| Insurance, | | 908 63 |
| Stationery and printing, | | 2,461 67 |
| Outside agencies and advertising, | | 1,377 22 |
| Contingencies, | | 1,618 12 |
| Taxes in Michigan, | 2,721 51 | |
| Taxes in other States, | 5,385 56 | |
| | | 8,107 07 |
| Total, | | $32,313 91 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $63,626 05 |
| Maintenance of motive power and cars, | 54,446 80 |
| Conducting transportation, | 79,838 78 |
| General expenses, including taxes, | 32,313 91 |
| Total operating expenses and taxes, | $230,225 54 |

| | |
|---|---|
| Operating expenses and taxes per mile of road, | $2,302 25 |
| Operating expenses and taxes per train mile run, for trains earning revenue [260,494 miles], | $0 87 |
| Proportion of operating expenses and taxes for Michigan, | $105,903 74 |
| Per centage of expenses to earnings, | 79.82 |
| Net earnings per mile of road, | 581 67 |
| Net earnings per train mile, | $0 24 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Purchase account, being amount of bonds of the F. W., J. & Saginaw R. R. Co., and accrued interest to January 1st, 1880, | | $2,719,579 53 |
| Cash items: | | |
| Cash, | $24,266 33 | |
| Due from agents and companies, | 28,598 58 | |
| | | 52,864 91 |
| Other assets: | | |
| Materials and supplies, | $2,446 53 | |
| Debit balances, | 1,392 72 | |
| | | $3,839 25 |
| Total assets, | | $2,776,283 69 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $2,719,579 53 |
| Funded debt, | | None. |
| Unfunded debt: | | |
| Vouchers and accounts, | $49,418 58 | |
| Other liabilities, | 243 40 | |
| | | $49,661 98 |
| Profit and loss, or income accounts, | | 7,042 18 |
| Total liabilities, | | $2,776,283 69 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Jackson to Reading, Mich., November 22d, 1869.
From Jackson to Angola, Ind., January 17th, 1870.
From Jackson to Fort Wayne, Ind., December 15th 1870.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths |
|---|---|---|
| Length completed in Michigan, | 46 00 | |
| Length completed in Indiana, | 54 00 | |
| Total length completed, | | 100 00 |
| Total length of road belonging to this company, | | 100 00 |
| Total length of road belonging to this company in Michigan, | 46 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 10 30 |
| Same in Michigan, | 4 80 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 110 30 |
| Same in Michigan, | 50 80 | |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 50 and 56 lbs., | | 46 00 |
| Total length of track laid with iron rails, weight per yard, 50 and 56 lbs., | | 64 30 |
| Total miles of road operated by this company, | | 100 00 |
| Total miles of road operated by this company in Michigan, | 46 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 13; aggregate length, feet, | | 840 |
| Total, | 13 | 840 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 67 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 37 |
| Number of cattle guards renewed during the year, | 19 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Michigan Central Air Line R. R., at Jackson.
Lake Shore & Michigan Southern R. R., at Jackson.
Lake Shore & Michigan Southern R. R., at Jonesville.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 54 |
| Number of crossings of highways at grade in this State without signs, | 54 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 19 |
| Same in Michigan, | 9 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 210 |
| Same in Michigan, | 97 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 92.00 |
| What is the average cost per rod? | $1 25 |
| The total cost of same? | $36,800 00 |

| | |
|---|---|
| How many miles of new fencing have you built during the year? | 3 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 9 |
| Average length of sections, | 5.2 miles. |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 24,390 |
| Number of new ties put in track in Michigan, | 11,219 |
| Average number of new ties per mile of road, | 244 |
| New rails put in track: | |
| Steel [tons 600] miles, | 7 |
| Total miles of track laid with new rails, | 7 |
| Between what points were new rails laid: | |
| From one mile south of Reading to Banker's Station. | |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 25,264 |
| Timber culverts replaced with timber—[number 26], timber used (feet B. M.), | 10,404 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 4 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 6 |
| Number of passenger cars—8-wheel, | 7 |
| Number express and baggage cars, | 2 |
| Number of box freight cars, | 222 |
| Number of stock cars, | 14 |
| Number of platform cars, | 153 |
| Number of conductors' way cars, | 5 |
| Number of locomotives equipped with train-brake, | 3 |
| Number of cars used in passenger trains equipped with train-brake, | 9 |
| What kind of train-brake is in use on your road? | Ward air-brake. |
| Number of passenger train cars with Miller platform and buffer, | 9 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 126,872 |
| Miles run by freight trains during the year, | 133,622 |
| Total mileage of trains earning revenue, | 260,494 |

| | |
|---|---|
| Miles run by work trains during the year, | 4,612 |
| Miles run by switching trains, | 1,665 |
| Total train mileage, | 266,771 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 2 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 60 |
| Average number of cars in freight trains, | 20 |
| Average weight of freight trains, exclusive of freight,—tons, | 220 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 12,561 | | |
| Number of local passengers carried, | 92,385 | | |
| Total number of passengers carried, | 104,946 | | |
| Total passenger mileage, or passengers carried one mile, | | 3,275,747 | |
| Average distance traveled by each passenger, | | 31.22 | |
| Average amount received from each passenger, | | | 0.86.4 |
| Highest rate of fare per mile, for any distance, | | | 0.03 |
| Lowest rate of fare per mile, for any distance, | | | 0.01.5 |
| Average rate of fare per mile, for through passengers, | | | 0.02.5 |
| Average rate of fare per mile, for local passengers, | | | 0.03 |
| Average rate of fare per mile, for all passengers, | | | 0.02.7 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 119,297 | |
| Number of tons of local freight carried, | 79,531 | |
| Total tons of freight carried, | 198,828 | |
| Total mileage of through freight, | | 8,490,781 |
| Total mileage of local freight, | | 3,303,359 |
| Total freight mileage, or tons carried one mile, | | 11,794,140 |
| Average ton haul for through freight, | | 71.2 |
| Average ton haul for local freight, | | 41.5 |
| Average ton haul for all freight, | | 59.4 |
| Average amount received for each ton haul, | | 0.97 |
| Average rate per ton per mile, received for through freight, | | 0.01.3 |
| Average rate per ton per mile, received for local freight, | | 0.02.2 |
| Average rate per ton per mile, received for all freight, | | 0.01.5 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct |
|---|---|---|
| Grain, | 22,356 | 11.24 |
| Flour, | 2,859 | 01.44 |
| Provisions (beef, pork, lard, etc.), | 4,584 | 02.31 |
| Animals, | 8,470 | 04.26 |
| Lumber and forest products, | 78,787 | 39.63 |
| Coal, | 9,891 | 04.97 |
| Plaster, | 1,176 | 00.59 |
| Salt, | 14,909 | 07.50 |
| Stone and brick, | 6,621 | 03.33 |
| Merchandise and other articles not enumerated above, | 49,175 | 24.73 |
| Total tons carried, | 198,828 | 100. |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. Tariff rates 1½ first-class freight rates. They do general merchandise business and deliver freight at our depots.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

National Despatch Line, St. Albans, Vt.
Merchants' Despatch Transportation Co., New York city.
Erie & North Shore Despatch Line, Detroit, Mich.
Hoosac Tunnel Line, Rochester, N. Y.
Red Line, Buffalo, N. Y.
Empire Line, Philadelphia, Pa.
Blue Line, Rochester N. Y.

No preferences of any kind given regular tariff rates. They furnish their own cars, for which we pay regular mileage rates.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads,* for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| National Despatch Line, St. Albans, Vt., | $568 52 |
| Merchants' Despatch Transportation Company, New York, | 194 07 |
| Union Line, Pittsburg, Pa., | 76 00 |
| Empire Line, Philadelphia, Pa., | 671 32 |
| Michigan Rolling Stock Co., Detroit, Mich., | 2,360 51 |
| Total, | $3,870 42 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

No.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$5,570.88 per annum.

*Telegraph.*

Number of miles of telegraph owned by company, - - - None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

American, 100 miles.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

### INJURED.

May 11th. Wm. O. Thompson, fireman, ¾ mile south of Montgomery, Mich., engine struck a horse that was running across the track while Thompson was on front end riding and threw it against him, fracturing the bones of one ankle and injuring his back.

November 23. J. B. Whitney, brakeman, Reading, Mich., hand pinched coupling cars; his own fault.

### TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | 1 | |
| Derailments | | | | | | |
| Falling from trains | | | | | | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | 1 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | | | | | 2 | |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons injured during the year on the entire line, | 3 |
| Same for Michigan, - - - - - - - - - | 2 |
| Number of casualties purely accidental in Michigan, - - | 1 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, - - - - - - - - | 1 |

STATE OF MICHIGAN, }
COUNTY OF JACKSON, } ss.

M. D. Woodford, Superintendent, and E. B. DeYoe, Cashier of the Fort Wayne & Jackson Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, M. D. WOODFORD,
E. B. DEYOE.

Subscribed and sworn to before me, this 25th day of May, A. D. 1882.
[L. S.] N. S. POTTER,
*Notary Public.*

# ANNUAL REPORT

OF THE

# GRAND HAVEN RAILROAD COMPANY,

*For the Period commencing January 1st and ending September 30, 1881.*

---

## GENERAL REMARKS.

This Road was operated under its original charter until September 30th, 1881, when it consolidated with the Chicago & West Michigan, and Grand Rapids, Newaygo & Lake Shore Railroad Companies, to form the Chicago & West Michigan Railway Co. All details of earnings, expenses, mileage, or traffic, not here given, are included with the report of the new corporation.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JAMES W. CONVERSE, Boston, Mass.
*Vice President,* JEPTHA H. WADE, Cleveland, Ohio.
*Secretary and Treasurer,* C. C. CONVERSE, Boston, Mass.

## DIRECTORS.

JAMES W. CONVERSE, Boston, Mass.
JEPTHA H. WADE, Cleveland, Ohio.
FRED H. MAY, Allegan, Mich.
C. C. CONVERSE, Boston, Mass.
J. H. WADE, JR., Cleveland, Ohio.
CHESTER WARNER, Grand Rapids, Mich.
CHARLES E. PRICE, Grand Rapids, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $84,031 14 |
| Total expense, including taxes, | $60,335 99 | |
| Net income, | | $23,695 15 |
| Balance for the year, | | $23,695 15 |
| Balance forward to C. and W. M. R'y Co., | 23,695 15 | |
| | $23,695 15 | $23,695 15 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $800,000 00 |
| Par value of shares, | $100.00 | | |
| Average price received per share, | $100.00 | | |
| Amount issued, $800,000, No. of shares, 8,000 | | | |
| Amount paid in on common, | | $800,000 00 | |
| Total amount paid in as per books of the company, | | | 800,000 00 |
| Amount realized in cash, | | $800,000 00 | |
| Amount paid in per mile of road owned by company, | | | 13,913 04 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | | |
|---|---|---|---|
| From local passengers, | | $24,630 38 | |
| From through passengers, | | 6,618 22 | |
| From express and baggage, | | 1,215 00 | |
| From mails, | | 2,500 62 | |
| Total earnings, passenger department, | | | $34,964 22 |
| Earnings per train mile run [62,053 miles], | $0.56 | | |

### EARNINGS, FREIGHT.

| | | | |
|---|---|---|---|
| From local traffic, | | $48,960 26 | |
| Total earnings, freight department, | | | 48,960 26 |
| Earnings per train mile run [31,293 miles], | $1.51 | | |
| Total transportation earnings, | | | $83,924 48 |

| | | |
|---|---|---|
| Earnings per mile of road operated [57.5 miles], | $1,461 41 | |
| Earnings per train mile run, from all trains earning revenue [93,346 miles], | $0 90 | |
| Proportion of earnings for Michigan, | $83,924 48 | |
| Income from all other sources, | | $106 66 |
| Total income from all sources, | | $84,031 14 |
| Proportion of income for Michigan, | $84,031 14 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $14,120 04 |
| Renewal of rails, | 8,694 45 |
| Renewal of ties, | 6,266 99 |
| Repairs of bridges, including culverts and cattle guards, | 1,770 75 |
| Repairs of fences, road crossings, and signs, | 1,516 73 |
| Repairs of buildings, | 1,145 61 |
| Total, | $33,514 57 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $1,896 99 |
| Repairs of passenger cars, | 839 68 |
| Repairs of freight cars, | 2,899 55 |
| Total, | $5,636 22 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $3,052 50 |
| Water-supply, | 263 27 |
| Oil and waste, | 597 32 |
| Locomotive service, | 3,238 31 |
| Passenger train service, | 913 64 |
| Passenger and freight train supplies, | 517 11 |
| Mileage of freight and passenger cars (debit balance), | 1,008 46 |
| Freight train service, | 1,671 38 |
| Telegraph expenses (maintenance and operating), | 190 70 |
| Damage and loss of freight and baggage, | 143 50 |
| Damages to property and cattle, | 36 10 |
| Agents and station service, Station supplies, | 4,313 76 |
| Total, | $15,946 05 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of clerks in general offices, | $677 50 |
| Law expenses, | 9 60 |
| Insurance, | 121 25 |
| Stationery and printing, | 997 33 |
| Contingencies, | 1,752 85 |
| Taxes in Michigan, | 1,680 62 |
| Total, | $5,239 15 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $33,514 57 |
| Maintenance of motive power and cars, | | 5,636 22 |
| Conducting transportation, | | 15,946 05 |
| General expenses, including taxes, | | 5,239 15 |
| Total operating expenses and taxes, | | $60,335 99 |
| Operating expenses and taxes per mile of road, | $1,049 33 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [93,346 miles], | $0 64.6 | |
| Proportion of operating expenses and taxes for Michigan, | $60,335 99 | |
| Per centage of expenses to earnings, | 71.89 | |
| Net earnings per mile of road, | $412 08 | |
| Net earnings per train mile, | $0 25.4 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | | $800,000 00 |
| Equipment account, | | |
| Other investments (specifying same), | | |
| Cash items: | | |
| Cash, | $46,103 65 | |
| Due from agents and companies, | 2,551 89 | |
| | | 48,655 55 |
| Other assets: | | |
| Materials and supplies, | | $1,107 09 |
| Total assets, | | $849,762 64 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $800,000 00 |
| Vouchers and accounts, | 13,982 87 | |
| Other liabilities, | 12,084 62 | |
| | | 26,067 49 |
| Profit and loss, or income accounts, | | 23,695 15 |
| Total liabilities, | | $849,762 64 |

STATE OF MICHIGAN, }
COUNTY OF MUSKEGON, } ss.

Geo. C. Kimball, General Manager of the Grand Haven Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), GEO. C. KIMBALL,
*General Manager.*

Subscribed and sworn to before me, this 1st day of May A. D. 1882.
[L. S.] N. WARD,
*Notary Public.*

ANNUAL REPORT

OF THE

# GRAND RAPIDS & INDIANA RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President and General Manager,* W. O. HUGHART, Grand Rapids.
*Vice President and Treasurer,* W. R. SHELBY, Grand Rapids.
*Secretaries,* J. H. & P. HUGHART, Grand Rapids, Indiana.
*Division Superintendents,* J. M. METHEANY, Grand Rapids. P. S. O'ROURKE, Fort Wayne, Ind.
*Chief Engineer,* M. M. STIMSON, Grand Rapids.
*Auditor,* F. A. GORHAM, Grand Rapids.
*General Passenger and Freight Agent,* A. B. LEET, Grand Rapids,
*General Counsel,* D. DARWIN HUGHES, Grand Rapids.

## DIRECTORS.

W. O. HUGHART, Grand Rapids, Mich.
HARVEY J. HOLLISTER, Grand Rapids, Mich.
W. R. SHELBY, Grand Rapids, Mich.
S. S. COBB, Kalamazoo, Mich.
JONATHAN G. WAIT, Sturgis, Mich.
C. A. ZOLLINGER, Fort Wayne, Ind.
PLINY HOAGLAND, Fort Wayne, Ind.
J. N. MCCULLOUGH, Pittsburg, Penn.
THOMAS D. MESSLER, Pittsburg, Penn.
WILLIAM THAW, Pittsburg, Penn.
GEORGE B. ROBERTS, Philadelphia, Penn,
JOHN P. GREEN, Philadelphia, Penn.
ROBERT B. POTTER, New York.

Term expires March 1st, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 767 |
| Number of stockholders in Michigan at same date, - - | 273 |
| Amount of full-paid stock held in Michigan at same date, - | $499,050 00 |

Date of annual meeting of stockholders,—First Wednesday in March.
Fiscal year of company ends December 31st.
General offices of the company are located at Grand Rapids.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $1,940,570 26 |
| Total expense, including taxes, | $1,377,679 88 | |
| Net income, | | $562,890 38 |
| Interest on funded debt, | 479,925 68 | |
| Balance applicable to dividends, | | $82,964 70 |
| Balance for the year, | | $82,964 70 |
| Balance (profit and loss) last year, | 1,679,622 43 | |
| Items not included in above as follows: | | |
| Advances for interest on bonds of Cincinnati, Richmond & Fort Wayne R. R., | 19,859 72 | |
| Balance forward to next year, | | 1,616,517 45 |
| | $1,699,482 15 | $1,699,482 15 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $5,000,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $4,985,000.00, No. of shares, | 49,850 | | |
| Amount paid in on common, | | $4,985,000 00 | |
| Amount paid in on shares not issued, | | 81 22 | |
| Total amount paid in as per books of the company, | | | 4,985,081 22 |
| Amount paid in per mile of road owned by company, | | 14,992 72 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1819, interest 7 per cent, payable semi-annually), | $6,905,000 00 |
| Second Mortgage Bonds (due ———, interest 7 per cent, payable semi-annually), from net income, if any, | 1,095,000 00 |
| Total amount of funded debt, | $8,000,000 00 |

FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for real estate, | $20,000 00 | |
| Other debts,—current credit balances, etc., | 2,515,302 26 | 2,535,302 26 |
| Total debt liabilities, | | $10,535,302 26 |

| | |
|---|---|
| Amount of debt liabilities per mile of road [332.5 miles], | $31,685 12 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | 9,899,222 91 |

Contingent liabilities as follows:

In conjunction with the Pennsylvania Company and the Cincinnati, Hamilton & Dayton Railroad Co., this Company guarantees payment of interest on $1,800,000.00 bonds of Cincinnati, Richmond & Ft. Wayne Railroad Company, which amounts to $126,000.00 per annum.

COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $12,025,295 21 |
| Average cost of construction per mile of road (not including sidings), [— miles], | 36,247 50 |
| Proportion of cost of construction for Michigan, | $10,127,543 66 |

*Cost of Equipment.*

| | |
|---|---|
| Total for equipment, | $1,214,721 47 |
| Average cost of equipment per mile of road operated by company [332.5 miles], | 3,653 30 |
| Proportion of cost of equipment for Michigan, | 1,020,730 45 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $13,267,016 68 |
| Average cost of same per mile, | 39,900 80 |
| Proportion of cost of road and equipment for Michigan, | 11,148,274 11 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $532,127 29 | |
| From through passengers, | 105,565 62 | |
| From express and baggage, | 18,430 39 | |
| From mails, | 22,326 12 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $678,449 42 |

| | |
|---|---|
| Earnings per train mile run [549,052 miles], | $1 23.6 |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $244,319 00 | |
| From through traffic, | 962,499 50 | |
| From other sources, freight department, | Nothing. | |
| Total earnings freight department, | | $1,206,818 50 |
| Earnings per train mile run [710,208 miles], | $1 69.9 | |
| Total transportation earnings, | | $1,885,267 92 |
| Earnings per mile of road operated [332.50 miles], | $5,669 98 | |
| Earnings per train mile run, from all trains earning revenue [1,259,260 miles], | $1 49.7 | |
| Proportion of earnings for Michigan, | $1,584,134 07 | |
| Rents for use of road, stations, etc., | | 3,300 00 |
| Income from all other sources: | | |
| Hire of cars, | | 10,013 64 |
| Telegraph, | | 15,224 62 |
| Interest and rentals, | | 17,417 83 |
| Miscellaneous, | | 9,346 25 |
| Total income from all sources, | | $1,940,570 26 |
| Proportion of income for Michigan, | $1,630,602 97 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $227,769 29 |
| Renewal of rails, | 157,437 18 |
| Renewal of ties, | 27,122 92 |
| Repairs of bridges, including culverts and cattle guards, | 32,556 68 |
| Repairs of fences, road crossings, and signs, | 10,960 69 |
| Repairs of buildings (including $45,489.21 for new general office, and $27,170.00 real estate), | 101,470 17 |
| Total, | $557,316 93 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, (including 5 new locomotives) | $96,827 50 |
| Repairs of passenger cars, | 47,005 78 |
| Repairs of freight cars (including payments on 400 new cars), | 106,469 03 |
| Total, | $250,302 31 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $124,158 25 |
| Water-supply, | 7,400 61 |
| Oil and waste, | 13,236 40 |
| Locomotive service, | 75,453 82 |
| Passenger train service, | 30,261 47 |
| Passenger train supplies, | 4,491 78 |
| Freight train service, | 47,590 65 |
| Freight train supplies, | 3,952 38 |
| Telegraph expenses (maintenance and operating), | 24,923 07 |
| Damage and loss of freight and baggage, | 1,032 23 |
| Damages to property and cattle, | 4,092 49 |
| Personal injuries, | 3,111 03 |
| Agents and station service, | 91,385 27 |
| Station supplies, | 26,816 48 |
| Total, | $457,905 93 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $15,719 43 |
| Salaries of clerks in general offices, | | 21,563 32 |
| Law expenses, | | 4,356 29 |
| Insurance, | | 1,624 50 |
| Stationery and printing, | | 11,955 57 |
| Outside agencies and advertising, | | 7,476 20 |
| Contingencies, | | 9,751 73 |
| Taxes in Michigan, | $34,769 12 | |
| Taxes in other States, | 4,938 55 | |
| | | 39,707 67 |
| Total, | | $112,154 71 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $557,316 93 |
| Maintenance of motive power and cars, | 250,302 31 |
| Conducting transportation, | 457,905 93 |
| General expenses, including taxes, | 112,154 71 |
| Total operating expenses and taxes, | $1,377,679 88 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 332.50 miles, | $4,143 40 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [1,259,260 miles), | $1.09.4 | |
| Proportion of operating expenses and taxes for Michigan, | $1,157,623 07 | |
| Per centage of expenses to earnings, | 70.99 | |
| Net earnings per mile of road, | $1,695 45 | |
| Net earnings per train mile, | $0 44.7 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $13,267,016 68 |
| Equipment account, | | |
| Other investments (specifying same): | | |
| Capital stock Grand Rapids & Indiana & Mackinaw Railroad Company, | | 770 00 |
| Cash items: | | |
| Cash, | $295,630 81 | |
| Bills receivable, | 1,882 95 | |
| Due from agents and companies, | 246,778 81 | |
| | | $544,292 57 |
| Other assets: | | |
| Materials and supplies, | | $91,786 78 |
| Income account. | | 1,616,517 45 |
| Total assets, | | $15,520,383 48 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $4,985,081 22 |
| Funded debt: | | |
| First Mortgage Bonds, | $1,010,000 00 | |
| First Mortgage Land Grant Bonds, | 1,895,000 00 | |
| First Mortgage Land Grant Guaranteed Bonds, | 4,000,000 00 | |
| Income Bonds, | 1,095,000 00 | |
| | | $8,000,000 00 |
| Unfunded debt: | | |
| Interest unpaid, Coup's held by Pa. R. R. Co., | $1,724,668 75 | |
| Interest unpaid, Coup's held by Pa. R. R. Co., | 137,502 02 | |
| Interest unpaid, Coupons not presented, | 141,995 61 | |
| Notes payable, held by Pennsylvania Co., | 336,839 92 | |
| Vouchers and accounts, | 149,513 69 | |
| Other liabilities: | | |
| Bond and mortgage on real estate, | 20,000 00 | |
| Due other companies, | 24,782 27 | |
| | | 2,535,302 26 |
| Total liabilities, | | $15,520,383 48 |

### LIABILITIES NOT INCLUDED IN BALANCE SHEET.

| | |
|---|---|
| Bonds guaranteed by this company *(interest only guaranteed), | $1,800,000 00 |
| Overdue interest on same, | None. |

### DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Fort Wayne, Indiana, to Sturgis, Mich., June 22, 1870.

* See Analysis of Debt Accounts.

From Sturgis, Mich., to Kalamazoo, Mich., August, 1870.
From Kalamazoo to Grand Rapids, October, 1870.
From Grand Rapids to Cedar Springs, December, 1867.
From Cedar Springs to Morley, June, 1869.
From Morley to Paris, August, 1870.
From Paris to Cadillac, December, 1871.
From Cadillac to Fife Lake, September, 1872.
From Fife Lake to Petoskey, May, 1874.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 279 39 | |
| Length completed in Indiana, | 53 11 | |
| Total length completed, | | 332 50 |
| Total length of road belonging to this company, | | 332 50 |
| Total length of road belonging to this company in Michigan, | 279 39 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 59 51 |
| Same in Michigan, | 55 50 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 392 01 |
| Same in Michigan, | 334 89 | |
| Gauge of track, 4 feet, 9 inches. | | |
| Total length of track laid with steel rails, weight per yard, 50 and 56 lbs., | | 152 64 |
| Total length of track laid with iron rails, weight per yard, 56 and 60 lbs., | | 182 25 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

Name, description, and length of each:

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Cincinnati, Richmond & Fort Wayne R. R. (lease), | 85 77 | |
| Allegan & Southeastern Railroad (lease), | 11 50 | |
| Traverse City Railroad (mutual consent—no lease yet executed), | 26 00 | |
| Total length of above roads, | | 123 27 |
| Total length of above roads in Michigan, | 37 50 | |
| Total length of above roads in other States, specifying each: | | |
| Indiana, | 85 77 | |
| Total miles of road operated by this company, | | 455 77 |
| Total miles of road operated by this company in Michigan, | 316 89 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, and combination, No. of, 9; aggregate length, ft., | | 1,725 |
| Wooden trestles, | 182; aggregate length, ft., | 16,363 |
| Total, | 191 | 18,088 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 177 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 297 |
| Number of cattle guards renewed during the year, | 80 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Lake Shore & Michigan Southern R. R., at Sturgis, Kalamazoo, Plainwell, and Grand Rapids.
Michigan Central R. R, at Wasepi, Kalamazoo, Grand Rapids.
Chicago & Grand Trunk R. R., at Vicksburg.
Allegan & Southeastern R. R., at Monteith.
Chicago & West Michigan R. R., at Grand Rapids, and 4½ miles north.
Detroit, Grand Haven & Milwaukee R. R., at Grand Rapids,
Detroit, Lansing & Northern R. R., at Howard City.
Flint & Pere Marquette R. R., at Reed City.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 275 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 6 |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | 3 |
| Number of crossings of highways under railroad, | 3 |
| Number of highway bridges 18 feet above track, | 3 |
| Number of highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions, | No. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 80 |
| Same in Michigan, | 68 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 1,525 |
| Same in Michigan, | 1,328 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 345.25 |
| What is the average cost per rod? | Unknown. |
| The total cost of same? | Unknown. |
| How many miles of new fencing have you built during the year? | 14.25 |

| | |
|---|---|
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Osceola county, | 2.45 |
| In Wexford county, | 46.50 |
| In Grand Traverse county, | 6.00 |
| In Kalkaska county, | 61.00 |
| In Antrim county, | 41.00 |
| In Charlevoix county, | 29.00 |
| Total miles, | 195.95 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 61 |
| Average length of sections,—miles, | 4.7 |
| Average number of men in each section gang, | 5 |
| Number of new ties put in whole line during the year, | 96,335 |
| Number of new ties put in track in Michigan, | 90,140 |
| Average number of new ties per mile of road, | 290 |
| New rails put in track: | |
| Iron [tons ——] miles, | 17.25 |
| Steel [tons ——], miles, | 37.64 |
| Total miles of track laid with new rails, | 54.89 |

Between what points were new rails laid:
Perrine and Grand Rapids.
Big Rapids and Orono.
Haring and Fife Lake.

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 348,863 |
| Amount of trestle work replaced with earth during the year (linear feet), | 423 |
| Timber culverts replaced with sewer pipe—number, | 10 |
| Timber culverts replaced with timber,—[number, —], timber used (feet B M.), | 65,000 |
| New bridges built during the year,—number, | 3 |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Rogue River | Combination | Wood and iron | December | 110 |
| Rogue River | Combination | Wood and iron | December | 135 |
| Rogue River | Combination | Wood and iron | December | 140 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 26 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 20 |

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of passenger cars—12-wheel, | 16 |
| Number of passenger cars—8-wheel, | 10 |
| Number of express and baggage cars, | 12 |
| Number of box freight cars, | 567 |
| Number of stock cars, | None. |
| Number of platform cars, | 1,050 |
| Number of conductors' way cars, | 33 |
| Other cars as follows: | |
| Snow plows, 5; wreck cars, 4; pile driver, 1, | 10 |
| Number of locomotives equipped with train-brake, | 18 |
| Number of cars used in passenger trains equipped with train-brake. | 38 |
| What kind of train-brake is in use on your road? | Westinghouse. |
| Number of passenger train cars with Miller platform and buffer, | None. |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 549,052 |
| Miles run by freight trains during the year, | 710,208 |
| Total mileage of trains earning revenue, | 1,259,260 |
| Miles run by work trains during the year, | 90,913 |
| Miles run by switching trains, | 225,183 |
| Total train mileage, | 1,575,356 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3.64 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 110 |
| Average number of cars in freight trains, | 17.59 |
| Average weight of freight trains, exclusive of freight,—tons, | 170 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Ctr. |
|---|---|---|---|
| Number of through passengers carried, | 45,740 | | |
| Number of local passengers carried, | 688,573 | | |
| Total number of passengers carried, | 734,313 | | |
| Total passenger mileage, or passengers carried one mile, | | 24,661,483 | |
| Average distance traveled by each passenger, | | 33.58 | |

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Average amount received from each passenger, | | | $0.86.8 |
| Highest rate of fare per mile, for any distance, | | | 0.03 |
| Lowest rate of fare per mile, for any distance, | | | 0.00.6 |
| Average rate of fare per mile, for through passengers, | | | 0.02.35 |
| Average rate of fare per mile, for local passengers, | | | 0.02.63 |
| Average rate of fare per mile, for all passengers, | | | 0.02.58 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 478,548 | |
| Number of tons of local freight carried, | 134,062 | |
| Total tons of freight carried, | 612,610 | |
| Total mileage of through freight, | | 70,033,911 |
| Total mileage of local freight, | | 9,282,562 |
| Total freight mileage, or tons carried one mile, | | 79,316,473 |
| Average ton haul for through freight, | | 146.33 |
| Average ton haul for local freight, | | 69.24 |
| Average ton haul for all freight, | | 129.46 |
| Average amount received for each ton haul, | | $1.97 |
| Average rate per ton per mile, received for through freight, | | 0.01.37 |
| Average rate per ton per mile, received for local freight, | | 0.02.63 |
| Average rate per ton per mile, received for all freight, | | 0:01.52 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 37,394 | 6.10 |
| Flour, | 4,455 | .73 |
| Provisions (beef, pork, lard, etc.), | 1,165 | .19 |
| Animals, | 4,107 | .67 |
| Other agricultural products, | 19,449 | 3.17 |
| Lumber and forest products, | 412,873 | 67.39 |
| Coal, | 23,896 | 3.90 |
| Plaster, | 5,066 | .83 |
| Salt, | 2,844 | .46 |
| Petroleum, | 2,796 | .46 |
| Railroad iron,—iron and steel rails, | 3,524 | .58 |
| Pig and bloom iron, | 2,029 | .33 |
| Other iron and castings, | 2,167 | .35 |
| Stone and brick, | 6,831 | 1.12 |
| Manufactures,—articles shipped from point of production, | 30,444 | 4.97 |
| Merchandise and other articles not enumerated above, | 53,570 | 8.75 |
| Total tons carried, | 612,610 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

United States Express Company, $78.12 per day for 5,000 lbs. through freight, which is received and delivered at depots.

Adams Express Company. Terms, 40 per cent of receipts of offices on this road; freight received and delivered at depots.

The above rates cover all the lines operated by this company.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Union Line, Pittsburg, Pa.
South Shore Line, Indianapolis, Indiana.
Great Western Despatch, Indianapolis, Ind.
Erie & Pacific Despatch, Indianapolis, Ind.
Commercial Express Fast Freight Line, Chicago, Ill.
Great Eastern Fast Freight Line, Montreal.

These lines run on our roads and furnish their own cars, for which we pay car mileage at regular rates. No preference given freight in any respect.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Arnot & Co., Elmira, N. Y., | $6 38 |
| Barney & Smith Manufacturing Co., Dayton, O., | 198 28 |
| Commercial Express Line, Buffalo, N. Y., | 126 97 |
| Comstock, C. C. Grand Rapids, Mich., | 205 48 |
| Cummer, J., & Son, Cadillac, Mich., | 1,081 86 |
| Cummer Lumber Co., Cadillac, Mich., | 20 42 |
| Dewing & Sons, Kalamazoo, Mich., | 565 81 |
| Empire Line, Philadelphia, Pa., | 68 18 |
| Erie & Pacific Despatch, Indianapolis, Ind., | 21 50 |
| Erie & Chicago Car Company, Detroit, Mich., | 10 63 |
| Great Western Despatch, Indianapolis, Ind., | 3 02 |
| Harrison, Wm., Grand Rapids, Mich., | 16 78 |
| Hood, Gale & Co., Big Rapids, Mich., | 15 27 |
| McCoy & Ayer, Cadillac, Mich., | 1,017 00 |
| National Despatch Line, St. Albans, Vt., | 116 17 |
| Osterhout & Fox Lumber Company, Grand Rapids, Mich., | 108 14 |
| Ohio Falls Car Company, Jeffersonville, Ind., | 238 05 |
| Red Line Transit Co., Buffalo, N. Y., | 265 66 |
| Rend W. P., & Co., Chicago, Ill., | 25 |

| | |
|---|---|
| Rice, E. B., Chicago, Ill., | $61 08 |
| Standard Oil Company, Cleveland, O., | 87 |
| Swartz, P. P., Grand Rapids, Mich., | 7 07 |
| Sharer, E. W., Cedar Springs, | 1 08 |
| United States Express Co., New York, | 1 49 |
| Union Line, Pittsburg, Pa., | 2,587 63 |
| Wells & French Co., Chicago, Ill., | 160 92 |
| Whiteley, Fassler & Kelly, Springfield, Ohio, | 55 56 |
| White Line Transit Co., Buffalo, N. Y., | 19 05 |
| Total, | $6,980 60 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Woodruff Sleeping Cars were run north of Grand Rapids during the summer months, but nothing was paid for their use but car mileage.

This company owns and runs three chair and sleeping cars on which the rates are graded according to distance, the highest charge being $1.50, and the lowest 25c.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Woodruff Sleeping & Parlor Coach Co., $1,590 72

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$22,326.10 per annum for daily service each way.

*Telegraph.*

Number of miles of telegraph owned by company, 544.9

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Western Union Telegraph Company owns one wire between Kalamazoo & Grand Rapids, on this company's poles, 48.6 miles.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

January 25. Edward Griffith, brakeman, LeRoy, fell between cars, coupling; lack of caution.

June 11. Henry Bartlett, conductor, Child's Mill, fell from train; purely accidental.

June 19. Patrick Shannesey, section foreman, Big Rapids, walking on track; intoxicated.

July 6. Jas. Sullivan, brakeman, Kalamazoo, fell under train; accidental.

September 8. W. A. Perrine, passenger, Kalamazoo, fell under train; accidental.

December 7. J. Brandol, near Grand Rapids, trespasser, carelessness.

December 15. C. E. Vickery, brakeman, Kalkaska, fell from top of cars; lack of caution.

December 23. Mrs. A. J. Acker, passenger, Howard City, tried to get on moving train; carelessness.

INJURED.

January 13. Frank Biska and John Wilson, Child's Mill, snow plow ran into rear end of freight train.

January 26. M. Hartwell, section foreman, Hobart, struck by train; carelessness.

February 15. C. D. Brader, brakeman, Fisher, coupling cars; carelessness.

April 1. A. Menkle, brakeman, Big Rapids, coupling; lack of caution.

April 3. Geo. Mull, brakeman, Kalamazoo, coupling cars; carelessness.

April 4. J. B. Haney's boy, Grand Rapids, foot caught between cars; trespasser.

June 13. Geo. Wall, brakeman, Cedar Springs, coupling; lack of caution.

August 22. A. W. Rowe, brakeman, Nottawa, coupling; lack of caution.

August 30. J. Donnelly, brakeman, coupling; lack of caution.

September 2. Unknown child, Kalamazoo, playing on track.

September 11. J. T. Ranney, brakeman, coupling; accidental.

October 17. Geo. Henderson, brakeman, Boyne Falls; lack of caution.

October 17. J. McCarty, brakeman, Kalamazoo, coupling; lack of caution.

November 14. Gotlieb Hoffman, near Reed City, trespasser; carelessness.

November 16. I. Odell, Kalamazoo, coupling; lack of caution.

December 20. L. L. Sargeant, brakeman, Stanwood, coupling; lack of caution.

TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | 2 | | |
| Coupling cars | | 3 | | | 11 | |
| Derailments | | | | | | |
| Falling from trains | 1 | 2 | | | | |
| Frogs | | | | | | |
| Getting on and off trains | 1 | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | 1 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | 1 |
| Trespassers | | 1 | | | | 2 |
| Total | 2 | 6 | | 2 | 12 | 3 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 12 |
| Same in Michigan, | 8 |
| Number of persons injured during the year on the entire line, | 24 |
| Same in Michigan, | 17 |
| Number of casualties purely accidental in Michigan, | 6 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 15 |
| Persons killed or injured in Michigan while intoxicated, | 1 |
| Trespassers and tramps killed or injured in Michigan, | 3 |

STATE OF MICHIGAN, } ss.
COUNTY OF KENT, }

W. O. Hughart, President, and F. A. Gorham, Auditor, of the Grand Rapids & Indiana Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, W. O. HUGHART, *President.*
F. A. GORHAM, *Auditor.*

Subscribed and sworn to before me, this 28th day of April, A. D. 1882.
[L. S.] GEO. C. PIERCE,
*Notary Public, Kent county, Michigan.*

# ANNUAL REPORT

OF THE

# ALLEGAN & SOUTHEASTERN RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

This road is leased and operated by the Grand Rapids & Indiana Railroad Company, and all details of traffic and other particulars not given in this report are included in the report of that corporation.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* THOMAS D. MESSLER, Pittsburg.
*Secretary,* F. A. GORHAM, Grand Rapids.
*Assistant Secretary,* S. B. LIGGETT, Pittsburg.
*Treasurer,* W. H. BARNES, Pittsburg,

## DIRECTORS.

THOMAS D. MESSLER, Pittsburg, Pa.
J. N. MCCULLOUGH, Pittsburg, Pa.
WILLIAM THAW, Pittsburg, Pa.
W. O. HUGHART, Grand Rapids, Mich.
W. R. SHELBY, Grand Rapids, Mich.
F. A. GORHAM, Grand Rapids, Mich.

Term expires first Wednesday in March, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 8 |
| Number of stockholders in Michigan at same date, - - - | 3 |
| Amount of full paid stock held in Michigan at same date, - | $300 00 |

Date of of annual meeting of stockholders,—first Wednesday in March.
Fiscal year of company ends December 31st.
General offices of the company are located at Grand Rapids, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $12,405 97 |
| Total expense, including taxes, | $9,595 31 | |
| Net income, | | $2,810 66 |
| Balance applicable to dividends, | | $2,810 66 |
| Balance for the year, | | $2,810 66 |
| Balance (profit and loss) last year, | | 222 12 |
| Balance forward to next year, | 3,032 78 | |
| | $3,032 78 | $3,032 78 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $1,500,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $250,700.00 No. of shares, 2,507 | | | |
| Amount paid in on common, | | $250,700 00 | |
| Total amount paid in as per books of the company, | | | 250,700 00 |
| Amount in property, | | $250,700 00 | |
| Amount paid in per mile of road owned by company, 100 miles, only 11.5 miles completed, | | 2,507 00 | |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $250,700 00 |
| Average cost of construction per mile of road (not including sidings), [100 miles], | 2,507 00 |
| Proportion of cost of construction for Michigan, | 250,700 00 |

### *Cost of Equipment.*

Equipment furnished by the G. R. & Ind. R. R. Co.

### *Cost of Road.*

| | |
|---|---|
| Total cost of road, | $250,700 00 |
| Average cost of same per mile, | 2,507 00 |
| Proportion of cost of road and equipment for Michigan, | 250,700 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $3,474 15 | |
| From through passengers, | 230 46 | |
| From express and baggage, | 21 50 | |
| Total earnings, passenger department, | | $3,726 11 |
| Earnings per train mile run [5,757 miles], | $0 64.7 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $1,231 29 | |
| From through traffic, | 7,388 16 | |
| Total earnings, freight department, | | $8,619 45 |
| Earnings per train mile run [8,639 miles], | $0 99.8 | |
| Total transportation earnings, | | $12,345 56 |
| Earnings per mile of road operated [11.50 miles], | $1,073 53 | |
| Earnings per train mile run, from all trains earning revenue [14,398 miles], | $0 85.7 | |
| Proportion of earnings for Michigan, | $12,345 56 | |
| Income from all other sources: | | |
| Telegraph, | | 31 61 |
| Miscellaneous, | | 28 80 |
| Total income from all sources, | | $12,405 97 |
| Proportion of income for Michigan, | $12,405 97 | |

### EXPENSES.

#### CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $1,538 07 |
| Renewal of ties, | 1,148 78 |
| Repairs of bridges, including culverts and cattle guards, | 374 18 |
| Repairs of fences, road-crossings, and signs, | 116 75 |
| Repairs of buildings, | 127 09 |
| Total, | $3,304 87 |

#### CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $1,522 01 |
| Repairs of passenger cars, | 7 90 |
| Repairs of freight cars, | 6 21 |
| Total, | $1,536 12 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $1,009 88 |
| Oil and waste, | 64 74 |
| Locomotive service, | 1,230 60 |
| Passenger train service, | 231 40 |
| Mileage of passenger cars (debit balance), | 472 88 |
| Freight train service, | 347 09 |
| Mileage of freight cars (debit balance), | 321 89 |
| Damage and loss of freight and baggage, | 10 15 |
| Agents and station service, | 873 50 |
| Total, | $4,562 13 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Stationery and printing, | $2 30 |
| Contingencies, | 29 59 |
| Taxes in Michigan, | 160 30 |
| Total, | $192 19 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $3,304 87 |
| Maintenance of motive power and cars, | 1,536 12 |
| Conducting transportation, | 4,562 13 |
| General expenses, including taxes, | 192 19 |
| Total operating expenses and taxes, | $9,595 31 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $834 37 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [14,398 miles], | $0 66.6 | |
| Proportion of operating expenses and taxes for Michigan, | | $9,595 31 |
| Per centage of expenses to earnings, [77.34 %] | | |
| Net earnings per mile of road, | $244 40 | |
| Net earnings per train mile, | 0 19.5 | |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $250,700 00 |
| Total assets, | $250,700 00 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | 250,700 00 |
| Total liabilities, | $250,700 00 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Monteith to Allegan, September, 1871.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 11 50 | |
| Total length completed, | | 11 50 |
| Total length of road belonging to this company, | | 11 50 |
| Total length of road belonging to this company in Michigan, | 11 50 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 1 28 |
| Same in Michigan, | 1 28 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 12 78 |
| Same in Michigan, | 12 78 | |
| Gauge of track, 4 feet, 9 inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 50 lbs. | | 12 78 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, | 2; aggregate length, feet, | 370 |
| Total, | 2 | 370 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 23 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 20 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Lake Shore & Michigan Southern R. R., at Allegan.
Grand Rapids & Indiana R. R., at Monteith.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 10 |
| Number of crossings of highways at grade in this State without signs, | 10 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 4 |
| Same in Michigan, | 4 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | Included in report of G. R. & I. R. R. Co. |
| Same in Michigan, | |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 1 |
| Average length of sections (miles), | 11.5 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 5,000 |
| Number of new ties put in track in Michigan, | 5,000 |
| Average number of new ties per mile of road, | 434 |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 6,272 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 5,759 |
| Miles run by freight trains during the year, | 8,639 |
| Total mileage of trains earning revenue, | 14,398 |
| Total train mileage, | 14,398 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 1.11 |
| Average weight of passenger trains, exclusive of passengers, tons, | 45 |
| Average number of cars in freight trains, | 294 |
| Average weight of freight trains, exclusive of freight, tons, | 55 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 807 | | |
| Number of local passengers carried, | 11,328 | | |
| Total number of passengers carried, | 12,135 | | |

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Total passenger mileage, or passengers carried one mile, | | 135,558 | |
| Average distance traveled by each passenger, | | 11.17 | |
| Average amount received from each passenger, | | | $0.30.5 |
| Highest rate of fare per mile, for any distance, | | | 0.03 |
| Lowest rate of fare per mile, for any distance, | | | 0.02 |
| Average rate of fare per mile, for through passengers, | | | 0.02.48 |
| Average rate of fare per mile, for local passengers, | | | 0.02.75 |
| Average rate of fare per mile, for all passengers, | | | 0.02.73 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | 26,575 | | |
| Number of tons of local freight carried, | 3,180 | | |
| Total tons of freight carried, | 39,755 | | |
| Total mileage of through freight, | | 304,292 | |
| Total mileage of local freight, | | 21,520 | |
| Total freight mileage, or tons carried one mile, | | 325,812 | |
| Average ton haul for through freight, | | 11.45 | |
| Average ton haul for local freight, | | 6.68 | |
| Average ton haul for all freight, | | 10.94 | |
| Average amount received for each ton haul, | | | $0.21.7 |
| Average rate per ton per mile, received for through freight, | | | 0.02.42 |
| Average rate per ton per mile, received for local freight, | | | 0.05.79 |
| Average rate per ton per mile, received for all freight, | | | 0.02.64 |

*Tonnage of Articles Transported.*

| | Tons. | Per Cent. |
|---|---|---|
| Grain, | 454 | 1.53 |
| Flour, | 387 | 1.30 |
| Provisions (beef, pork, lard, etc.), | 39 | .13 |
| Animals, | 182 | .61 |
| Other agricultural products, | 509 | 1.71 |
| Lumber and forest products, | 24,015 | 80.71 |
| Coal, | 859 | 2.89 |
| Plaster, | 110 | .37 |
| Salt, | 49 | .16 |
| Petroleum, | 86 | .29 |
| Railroad iron,—iron and steel rails, | 38 | .13 |
| Pig and bloom iron, | 123 | .41 |
| Other iron and castings, | 190 | .64 |
| Stone and brick, | 163 | .55 |
| Manufactures,—articles shipped from point of production, | 1,520 | 5.11 |
| Merchandise and other articles not enumerated above, | 1,031 | 3.46 |
| Total tons carried, | 29,755 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

None.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Union Line, Pittsburgh, Penn.
South Shore Line, Indianapolis, Ind.
Great Western Despatch, Indianapolis, Ind.
Erie & Pacific Despatch, Indianapolis, Ind.
Commercial Express Fast Freight Line, Chicago, Ill.
Great Eastern Fast Freight Line, Montreal.

These lines run on this road and furnish their own cars for which car mileage is paid at regular rates. No preference given freight in any respect.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid each?

Included in report made by G. R. & I. R. R. Co.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

None.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

No service performed.

### *Telegraph.*

Number of miles of telegraph owned by company, - - - - 11.5

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

None.

STATE OF MICHIGAN, }
COUNTY OF KENT, } ss.

W. O. Hughart, President, and F. A. Gorham, Auditor, of the Grand Rapids & Indiana Railroad Company, Lessee of Allegan & Southeastern Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), W. O. HUGHART, *President.*
F. A. GORHAM, *Auditor.*

Subscribed and sworn to before me, this 28th day of April, A. D. 1882.
[L. S.] GEO. C. PIERCE,
*Notary Public, Kent county, Michigan.*

ANNUAL REPORT

OF THE

# GRAND RAPIDS, NEWAYGO & LAKE SHORE RAILROAD COMPANY.

*For the Period Commencing January 1st, and Closing September 30, 1881.*

## GENERAL REMARKS.

This road was operated under its original charter until October 1st, 1881, when it was consolidated with the Chicago & West Michigan and Grand Haven Railroad Companies, to form the Chicago & West Michigan Railway Corporation. All details of report not found here are included with those of the new corporation.

## GENERAL EXHIBIT.

| | | |
|---|---|---|
| Total income, | | $103,584 03 |
| Total expense, including taxes, | $77,596 92 | |
| Net income, | | $25,987 11 |
| Interest on funded debt, | 36,234 76 | |
| Balance for the year, | $10,247 65 | |
| Balance forward to C. & W. M. R'y Co., | | 10,247 65 |
| | $10,247 65 | $10,247 65 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $550,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $550,000.00, No. of shares, 5,500 | | | |
| Amount paid in on common, | | $550,000 00 | |
| Total amount paid in as per books of the Company, | | | $550,000 00 |
| Amount paid in per mile of road owned by company, | | | 11,956 52 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due July 1st, 1891, interest 8 per cent, payable January 1st, July 1st), | $576,000 00 |
| Mortgage Bonds (due June 1st, 1905, interest 7 per cent, payable January 1st, December 1st), | 200,000 00 |
| Total amount of funded debt, | $776,000 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $31,146 96 | |
| From through passengers, | 280 92 | |
| From express and baggage, | 1,028 64 | |
| From mails, | 1,504 65 | |
| Total earnings, passenger department, | | $33,961 17 |
| Earnings per train mile run [22,200 miles], | $1 53 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $68,894 73 | |
| Total earnings, freight department, | | $68,894 73 |
| Earnings per train mile run [43,078 miles], | $1 60 | |
| Total transportation earnings, | | $102,855 90 |
| Earnings per mile of road operated [46 miles], | $2,251 82 | |
| Earnings per train mile run, from all trains earning revenue [65,278 miles], | $1 57.5 | |
| Proportion of earnings for Michigan, | 102,855 90 | |
| Income from all other sources: | | |
| Telegraph, | | 728 13 |
| Total income from all sources, | | $103,584 03 |
| Proportion of income for Michigan, | 103,584 03 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $17,173 66 |
| Renewal of rails, | 20,384 52 |
| Renewal of ties, | 4,600 18 |
| Repairs of bridges, including culverts and cattle guards, | 1,107 04 |
| Repairs of fences, road-crossings, and signs, | 821 42 |
| Repairs of buildings, | 695 01 |
| Total, | $44,781 83 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $2,081 18 |
| Repairs of passenger cars, | 2,327 91 |
| Repairs of freight cars, | 7,470 09 |
| Total, | $11,879 18 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $2,740 39 |
| Water-supply, | 290 51 |
| Oil and waste, | 530 10 |
| Locomotive service, | 5,195 49 |
| Passenger train service, | 1,126 48 |
| Passenger and freight train supplies, | 441 96 |
| Freight train service, | 2,117 24 |
| Telegraph expenses (maintenance and operating), | 283 21 |
| Damages to property and cattle, | 112 90 |
| Personal injuries, | 142 00 |
| Agents and station service, Station supplies, | 7,208 72 |
| Total, | $17,840 31 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of clerks in general offices, | $517 50 |
| Law expenses, | 30 90 |
| Insurance, | 40 00 |
| Stationery and printing, | 422 96 |
| Contingencies, | 12 56 |
| Taxes in Michigan, | 2,071 68 |
| Total, | $3,095 60 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $44,781 83 |
| Maintenance of motive power and cars, | 11,879 18 |
| Conducting transportation, | 17,840 31 |
| General expenses, including taxes, | 3,095 60 |
| Total operating expenses and taxes, | $77,596 92 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $1,686 88 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [65,278 miles], | $1 19 | |
| Proportion of operating expenses and taxes for Michigan, | $77,596 92 | |
| Per centage of expenses to earnings, | 72.98 | |
| Net earnings per mile of road, | 564 94 | |
| Net earnings per train mile, | $0 38.5 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | |
| Equipment account, | | $1,326,000 00 |
| Other investments (specifying same): | | |
| Grand Rapids Extension, | | $12,131 26 |
| Cash items: | | |
| Due from agents and companies, | 3,820 54 | |
| | | 3,820 54 |
| Other assets: | | |
| Materials and supplies, | $56 60 | |
| Debit balances, | 7,154 21 | |
| | | $7,210 81 |
| Balance to Profit and Loss, | | 10,247 65 |
| Total assets, | | $1,359,410 26 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $550,000 00 |
| Funded debt, | | 776,000 00 |
| Unfunded debt: | | |
| Interest unpaid, | 12,053 75 | |
| Vouchers and accounts, | 21,356 51 | |
| | | 33,410 26 |
| Total liabilities, | | $1,359,410 26 |

STATE OF MICHIGAN, }
COUNTY OF MUSKEGON, } ss.

Geo. C. Kimball, General Manager of the Grand Rapids, Newaygo & Lake Shore Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed) GEO. C. KIMBALL,
*General Manager.*

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.
(L. S.) N. WARD,
*Notary Public.*

# ANNUAL REPORT

OF THE

# LAKE SHORE & MICHIGAN SOUTHERN RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* WM. H. VANDERBILT, New York.
*Vice President,* AUGUSTUS SCHELL, New York.
*Secretary,* E. D. WORCESTER. New York.
*Treasurer,* E. D. WORCESTER, New York.
*General Manager,* JOHN NEWELL, Cleveland.
*General Superintendent,* P. P. WRIGHT, New York.
*Division Superintendents, Michigan,* - - - J. E. CURTIS, Toledo, Ohio. W. H. CANNIFF, Lansing, Mich. T. J. CHARLESWORTH, Detroit, Mich. A. G. AMSDEN, Kalamazoo, Mich.
*Chief Engineer,* L. H. CLARKE, Cleveland.
*Superintendent of Telegraph,* WM. KLINE, Toledo.
*Auditor,* C. P. LELAND, Cleveland.
*General Passenger Agent,* W. P. JOHNSON, Chicago.
*General Freight Agent,* GEO. H. VAILLANT, Cleveland.
*Attorney,* ASHLEY POND, Detroit.

## DIRECTORS.

WM. H. VANDERBILT, New York.
CORNELIUS VANDERBILT, New York.
WILLIAM K. VANDERBILT, New York.
AUGUSTUS SCHELL, New York,
SAMUEL F. BARGER, New York.
JOHN E. BURRILL, New York.
DARIUS O. MILLS, New York.
AMASA STONE, Cleveland, O.
HENRY B. PAYNE, Cleveland, O.
WILLIAM L. SCOTT, Erie, Pa.
CHARLES M. REED, Erie, Pa.
RASSELAS BROWN, Warren, Pa.
ALBERT KEEP, Chicago, Ill,

Term expires May 3d, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election (1882), | 2,551 |
| Number of stockholders in Michigan at same date, | 23 |
| Amount of full-paid stock held in Michigan at same date, 679 shares, | $67,900 |

Date of annual meeting of stockholders,—first Wednesday in May.
Fiscal year of company ends December 31.
General offices of the company are located at Cleveland, O.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | $17,971,391 33<br>214,129 15 | $18,185,520 48 |
| Total expense, including taxes, | $11,278,429 19 | |
| Net income, | | $6,907,091 29 |
| Interest on funded debt, | $2,612,230 00 | |
| Interest on guaranteed stock, | 53,350 00 | |
| Rentals, | 273,924 68 | |
| | | 2,939,504 68 |
| Balance applicable to dividends, | | $3,967,586 61 |
| Dividends declared (8 per cent), | | 3,957,320 00 |
| Balance for the year, | | $10,266 61 |
| Balance (profit and loss) last year, | | 4,702,223 70 |
| Balance forward to next year, | 4,712,490 31 | |
| | $4,712,490 31 | 4,712,490 31 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $50,000,000 00 |
| Par value of shares, | $100 00 | | |
| Amount issued, $50,000,000.00; No. of shares, | 50,000 | | |
| Amount paid in on common, | | $49,466,500 00 | |
| Amount paid in on preferred, | | 533,500 00 | |
| Total amount paid in as per books of the company, | | | 50,000,000 00 |
| Amount paid in per mile of road owned by company, 864.87 miles, | | $57,827 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| Date of Issue. | NAME AND CHARACTER. | Miles included in Mortgage. | When Due. | Amount Outstanding. | Rate of Interest and When Payable. |
|---|---|---|---|---|---|
| July 1, 1870 | Lake Shore & Michigan Southern—Consolidated First Mortgage Sinking Fund | 864 | July 1, 1900 | $8,956,000 | Reg'd Jan., Apr., July and Oct. Coupon Jan. and July. |
| April 1, 1869 | Lake Shore Railway—Dividend Bonds | 258 | April 1, 1899 | 1,356,000 | April and October. |
| Oct. 1, 1867 | Cleveland, Painesville & Ashtabula—Third Mortgage | 95 | Oct. 1, 1892 | 920,000 | April and October. |
| May 1, 1855 | Michigan Southern & Northern Indiana—First Mortgage | 451 | May 1, 1885 | 5,240,000 | May and November. |
| July 1, 1855 | Cleveland & Toledo—First Mortgage | 162 | July 1, 1885 | 1,596,000 | January and July. |
| April 1, 1866 | Cleveland & Toledo—Second Mortgage | 162 | April 1, 1896 | 849,000 | April and October. |
| July 1, 1862 | Buffalo & State Line—Mortgage | 88 | July 1, 1892 | 200,000 | January and July. |
| Sept. 1, 1866 | Buffalo & State Line—Mortgage | 88 | Sept. 1, 1896 | 300,000 | March and September. |
| April 1, 1868 | Buffalo & Erie—Mortgage | 88 | April 1, 1898 | 2,534,000 | April and October. |
| | Total am't outstanding of the First Gen. Mort. of $25,000,000 | ..... | ..... | $22,250,000 | |
| Dec. 1, 1873 | Lake Shore & Mich. South.—Consolidated Second Gen. Mort. | 864 | Dec. 1, 1903 | 12,138,000 | June and December. |
| Oct. 1, 1872 | Lake Shore & Michigan Southern—Bonds of 1882 | ..... | Oct. 1, 1882 | 2,527,000 | April and October. |
| | Total am't outstanding of the Sec'd Gen. Mort. of $25,000,000 | ..... | ..... | $14,665,000 | |
| Total funded debt | | | | $36,915,000 | All 7 Per Cent. |

Total amount of funded debt, . . . . . $36,915,000 00

### FLOATING DEBT.

Current credit balances, etc., . . . . . $2,131,407 30

Total debt liabilities, . . . . . $39,046,407 30

Amount of debt liabilities per mile of road [864.87 miles], . . . . . $45,147 14

Amount of liabilities, after deducting all assets not representing permanent investments, . . . . 37,327,543 02

Contingent liabilities as follows:

Guarantee Detroit, Monroe & Toledo First Mortgage Bonds, 7 per cent, . . 924,000 00

Guarantee Cincinnati & Springfield, First Mortgage 7 per cent Bonds, . . . 1,000,000 00

1,924,000 00

Both roads take care of themselves.

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $66,500,000 00 |
| Average cost of construction per mile of road not including sidings, [864.87 miles], | 76,890 16 |
| Proportion of cost of construction for Michigan, 187 miles, | 14,378,459 92 |

### *Cost of Equipment.*

| | |
|---|---|
| Total for equipment, | $16,150,000 00 |
| Average cost of equipment per mile of road operated by company [1,177.67 miles], | 13,713 51 |
| Proportion of cost of road and equipment for Michigan, 187 miles. | 2,564,426 37 |

### *Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $82,650,000 00 |
| Average cost of same per mile, | 90,603 67 |
| Proportion of cost of road and equipment for Michigan, | 16,942,886 29 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | | | |
|---|---|---|---|
| Double track extension, 18.08 miles, | | | $248,545 05 |
| Land, | | | 67,621 49 |
| New locomotives,—38, | | | 377,031 00 |
| New freight cars, 2,450, | | | 1,394,969 00 |
| Any other expenditures charged to property account (specifying the same): | | | |
| New side tracks, 36.21 miles, | | | 330,027 02 |
| Reduction of grade and change of line, | | | 142,510 70 |
| Four new bridges, | | | 111,295 74 |
| Total charges to property account during the year, | Construction, | $900,000 00 | |
| | Equipment, | 1,772,000 00 | $2,672,000 00 |
| Net addition to property account for the year, | | | $2,672,000 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $3,339,106 19 | |
| From through passengers, | 795,682 56 | |
| From express and baggage, | 364,036 32 | |
| From mails, | 699,416 54 | |
| Total earnings, passenger department, | | $5,198,241 61 |
| Earnings per train mile run [2,910,400 miles], | $1 78 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $9,258,202 21 | |
| From through traffic, | 3,217,495 38 | |
| From other sources, freight department, | 184,289 65 | |
| Total earnings, freight department, | | $12,659,987 24 |
| Earnings per train mile run [7,704,600 miles], | $1 64 | |
| Total transportation earnings, | | $17,858,228 85 |
| Earnings per mile of road operated [1,177.67 miles], | $15,164 03 | |
| Earnings per train mile run, from all trains earning revenue [10,615,000 miles], | $1 68 | |
| Proportion of earnings for Michigan: | | |
| L. S. & M. S. proper and branches, | 2,492,523 45 | |
| Detroit, Monroe & Toledo, | 438,134 58 | |
| Kalamazoo & White Pigeon, | 111,289 43 | |
| Kalamazoo, Allegan & Grand Rapids, | 154,129 66 | |
| Northern Central Michigan, | 95,738 76 | |
| | | $3,291,815 88 |
| Rents for use of road, stations, etc., | | 91,391 72 |
| Income from all other sources, | | 21,770 76 |
| Interest and dividends on assets, | | 214,129 15 |
| Total income from all sources, | | $18,185,520 48 |
| Proportion of income for Michigan, | $3,291,815 88 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $963,303 12 |
| Renewal of rails, | 414,264 44 |
| Renewal of ties, | 288,258 72 |
| Repairs of bridges, including culverts and cattle guards, | 139,607 65 |
| Repairs of fences, road crossings, and signs, | 63,604 90 |
| Repairs of buildings, | 313,470 76 |
| Total, | $2,182,509 59 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $698,705 33 |
| Repairs of passenger cars, | 220,363 85 |
| Repairs of freight cars, | 677,468 29 |
| Total, | $1,596,537 47 |

CLASS 3.—*Conducting Transportation.*

| | | |
|---|---|---|
| Fuel for locomotives, 511,069 tons coal, 31,760 cords wood, | | $1,225,607 87 |
| Water-supply, | | 68,078 49 |
| Oil and waste, | | 122,880 48 |
| Locomotive service, | | 981,024 46 |
| Passenger train service, | | 179,990 48 |
| Passenger train supplies, | | 23,774 43 |
| Freight train service, | | 580,876 16 |
| Freight train supplies, | | 15,665 70 |
| Mileage of freight cars (debit balance), | | 489,479 09 |
| Telegraph expenses (maintenance and operating), | | 243,837 83 |
| Damage and loss of freight and baggage, | | 49,721 00 |
| Damages to property and cattle, | | 38,961 60 |
| Personal injuries, | | 20,573 75 |
| Agents and station service, | | 2,099,691 68 |
| Station supplies, | | 80,020 33 |
| Total, | | $6,220,183 35 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $103,499 28 |
| Salaries of clerks in general offices, | | 195,427 42 |
| Law expenses, | | 46,121 13 |
| Rents payable, | | 106,597 13 |
| Stationery and printing, | | 69,460 01 |
| Outside agencies and advertising, | | 250,266 35 |
| Contingencies, | | 35,261 81 |
| Taxes in Michigan, | $64,273 26 | |
| Taxes in other States, | 408,292 39 | |
| | | 472,565 65 |
| Total, | | $1,279,198 78 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $2,182,509 59 |
| Maintenance of motive power and cars, | | 1,596,537 47 |
| Conducting transportation, | | 6,220,183 35 |
| General expenses, including taxes, | | 1,279,198 78 |
| Total operating expenses and taxes, | | $11,278,429 19 |
| Operating expenses and taxes per mile of road, | $9,576 90 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [10,615,000 miles], | $1 06 | |
| Proportion of operating expenses and taxes for Michigan: | | |
| L. S. & M. S. proper and branches, | 1,564,307 43 | |
| Detroit, Monroe & Toledo, | 289,767 01 | |

| | | |
|---|---|---|
| Kalamazoo & White Pigeon, | $103,975 32 | |
| Kalamazoo, Allegan & Grand Rapids, | 151,286 67 | |
| Northern Central Michigan, | 78,274 30 | |
| | | $2,187,610 73 |
| Per centage of expenses to earnings, | 62.76 | |
| Net earnings per mile of road, | $5,865 05 | |
| Net earnings per train mile, | $0 65. | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $66,500,000 00 |
| Equipment account, | | 16,150,000 00 |
| Other investments (specifying same): | | |
| Detroit, Monroe & Toledo Railroad, | $1,381,600 00 | |
| White Pigeon & Kalamazoo Railroad, | 610,000 00 | |
| Northern Central Michigan Railroad, | 1,357,000 00 | |
| Interest in Jamestown and Franklin Railroad, | 2,112,769 19 | |
| Interest in Chicago & Canada Southern, Railroad, | 660,000 00 | |
| Stocks & bonds in other companies, | 2,759,886 71 | |
| Pacific Hotel Company, Chicago, | 428,212 50 | |
| | | 8,909,468 40 |
| Cash items: | | |
| Cash, | $724,669 05 | |
| Due from agents and companies, | 994,195 23 | |
| | | 1,718,864 28 |
| Other assets: | | |
| Materials and supplies, | | $1,166,890 03 |
| Debit balances, | | 131,876 99 |
| General office property and other real estate, | | 305,797 91 |
| Total assets, | | $95,282,897 61 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $50,000,000 00 |
| Funded debt: | | |
| L. S. & M. S., | $36,915,000 00 | |
| Detroit, Monroe & Toledo, | 924,000 00 | |
| Kalamazoo & White Pigeon, | 600,000 00 | |
| | | 38,439,000 00 |
| Unfunded debt: | | |
| Dividends unpaid, | $1,016,005 00 | |
| Vouchers and accounts, | 1,115,402 30 | |
| | | 2,131,407 30 |
| Profit and loss, or income accounts, | | 4,712,490 31 |
| Total liabilities, | | $95,282,897 61 |

*Liabilities not Included in Balance Sheet.*

| | |
|---|---|
| Bonds guaranteed by this company, | $1,924,000 00 |
| Total, | $1,924,000 00 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:

The building of this road was undertaken by the State in 1837; but three years elapsed before any portion was opened for business. The first train was run—

From Monroe to Adrian, November 23, 1840.
From Adrian to Hudson, May 27, 1843.
From Hudson to Hillsdale, September 25, 1843.

The State suspended operations in building at the latter point, and in 1846 sold the road to the Michigan Southern Railroad Company, of which the present company is the successor. The extension of the road was one of the conditions of sale, and was completed as follows:

From Hillsdale to Jonesville, September, 1850.
From Jonesville to Coldwater, December, 1850.
From Coldwater to Sturgis, March, 1851.
From Sturgis to White Pigeon, July, 1851.
From White Pigeon to South Bend, Ind., October 4, 1851.
From South Bend to Laporte, Ind., January 9, 1852.
From Laporte to Ainsworth (South Chicago), February, 1852.
From Toledo to Chicago, May 22, 1852.
From Tecumseh to Manchester, 1855.
From Manchester to Jackson, July, 1857.
From Toledo to Elkhart (Air Line), May, 1857.

MAIN LINE.—BUFFALO TO CHICAGO.

| | | |
|---|---|---|
| Length of road completed, from— | | |
| Buffalo to Erie, | 88.00 miles. | |
| Erie to Cleveland, | 95.50 miles. | |
| Cleveland to west end Toledo bridge, via Norwalk, | 111.77 miles. | |
| West end Toledo Bridge to Toledo, | 1.10 miles. | |
| Toledo to Chicago, via Adrian, | 244.12 miles. | |
| | | 540.49 miles. |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 115 95 | |
| Length completed in New York, | 69 50 | |
| Length completed in Pennsylvania, | 44 06 | |
| Length completed in Ohio, | 195 01 | |
| Length completed in Indiana, | 101 95 | |
| Length completed in Illinois, | 14 02 | |
| Total length completed, | | 540 49 |
| Length of double track on main line, | | 249 13 |

BRANCHES.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Elyria Junction to Milbury Junction, via Sandusky, | 72 95 | |
| Sandusky Pier, from Junction to Old Depot, | 3 72 | |
| Air Line Junction to Elkhart, | 130 83 | |
| Lenawee Junction to Jackson, | 41 98 | |
| Lenawee Junction to Monroe, | 29 37 | |
| Palmyra to Adrian, | 5 72 | |
| Ashtabula to Ashtabula Harbor, | 2 33 | |
| Ashtabula to Jamestown, | 35 98 | |
| Junction with D. A. V. & Pitts. R. R. at Dunkirk, | 1 50 | |
| Total length of branches owned by company, | | 324 38 |
| Total length of branches owned by company in Michigan, | 77 07 | |
| Total length of road belonging to this company, | | 864 87 |
| Total length of road belonging to this company in Michigan, | 193 02 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 465 80 |
| Same in Michigan, | 60 15 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 1,579 80 |
| Same in Michigan, | 253 17 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 60 and 65 lbs.,—entire system, | | 1,237 74 |
| Total length of track laid with iron rails, weight per yard, 56 and 60 lbs., | | 708 92 |

*Proprietary Roads (owned wholly by this Company).*

| | | |
|---|---|---|
| Detroit, Monroe & Toledo Railroad— | | |
| Air Line Junction to Detroit, | 62 36 | |
| Kalamazoo & White Pigeon Railroad— | | |
| White Pigeon to Kalamazoo, | 36 57 | |
| Northern Central Michigan Railroad— | | |
| Jonesville to North Lansing, | 61 14 | |
| | | 160 07 |

*Roads Operated under Lease.*

| | | | |
|---|---|---|---|
| Kalamazoo, Allegan & Grand Rapids Railroad (rental $103,800 per year)— | | | |
| Kalamazoo to Grand Rapids, | | 58 42 | |
| Jamestown & Franklin Railroad (40 per cent of gross earnings)— | | | |
| Jamestown to Oil City, | | 50 91 | |
| Mahoning Coal Railroad (40 per cent of gross earnings)— | | | |
| Andover to Youngstown, | 38.31 miles. | | |
| Tyrrell Hill to Vienna, | 2.68 miles. | | |
| Coalburg to New York, O., | 0.99 miles. | | |
| Vienna to Holiday Bank, | 1.42 miles. | 43 40 | |
| | | | 152 73 |
| Total length of above roads, | | | 312 80 |

| | Miles. 100th. | Miles. 100ths. |
|---|---|---|
| Total length of above roads in Michigan, | 210 13 | |
| Total length of above roads in other States, specifying each: | | |
| Ohio, | 51 76 | |
| Pennsylvania, | 50 91 | |
| Total miles of road operated by this company, | | 1,177 67 |
| Total miles of road operated by this company in Michigan, | 403 15 | |

*Number of Bridges and Trestles in Michigan.*

| | | | |
|---|---|---|---|
| Wooden bridges, number of, | 18; | aggregate length, feet, | 2,576 |
| Combination bridges, number of, | 1; | aggregate length, feet, | 305 |
| Iron bridges, number of, | 2; | aggregate length, feet, | 59 |
| Wooden trestles, number of, | 26; | aggregate length, feet, | 3,426 |
| Total, | 47 | | 6,366 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 397 |
| Stone, number, | 69 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 1,169 |
| Number of cattle guards renewed during the year, | 99 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Grand Rapids & Indiana R. R., at Sturgis.
Fort Wayne & Jackson R. R, at near Jonesville and Jackson.
Michigan Central Air Line R. R., at Jackson.
Wabash, St. Louis & Pacific R. R., at Adrian and Raisin Centre.
Toledo & Ann Arbor R. R., near Petersburg.
Chicago & Canada Southern R. R., at Deerfield and Grosvenor.
Detroit, Hillsdale & S. W. R. R., at Manchester and Hillsdale.

What railroads cross your road either over or under your grade in this State and where?
Detroit, Hillsdale & Southwestern R. R. at Manchester and Hillsdale.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 580 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 27 |
| Number of crossings of highways at grade in this State without signs, | 2 |
| Number of crossings of highways over railroad, | 4 |
| Number of crossings of highways under railroad, | 3 |
| Number of highway bridges 18 feet above track, | 4 |

| | |
|---|---|
| Number of highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions? In process of erection. | |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 270 |
| Same in Michigan, | 80 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 11,460 |
| Same in Michigan, estimated 25 per cent, | 2,865 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 709 |
| What is the average cost per rod? | $1 10 |
| The total cost of same? | $281,248 00 |
| How many miles of new fencing have you built during the year?—Michigan, | 11.81 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 74 |
| Average length of sections, Michigan, miles, | 5.45 |
| Average number of men in each section gang, | 4.25 |
| Number of new ties put in whole line during the year, | 777,855 |
| Number of new ties put in track in Michigan, | 160,502 |
| Average number of new ties per mile of road,—whole line, | 661 |
| New rails put in track, whole line: | |
| Iron [tons 291] miles, | 3.09 |
| Steel [tons 12,612] miles, | 123.48 |
| Total miles of track laid with new rails, | 126.57 |
| Between what points were new rails laid: Wherever required. | |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of trestle work replaced during the year (linear feet), —entire line, | 3,371 |
| Timber culverts replaced with stone—number, entire line, | 3 |
| Timber culverts replaced with timber,—number, | 14 |
| New bridges built during the year,—number, | 4 |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Polk, Pa. | Howe Truss | Wood | September | 100 |
| Irving, N. Y. | Plate Girder | Iron | September | 180 |
| Ceylon, O. | Plate Girder | Iron | October | 61 |
| Stryker, O., | Plate Girder | Iron | December | 180 |

## ROLLING STOCK.

| | | |
|---|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | | 378 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | | 154 |
| Number of passenger cars—12-wheel, | 1st class, 100 | |
| Number of passenger cars—8-wheel, | 2d class and emigr't, 64 | 164 |
| Number express and baggage cars, and mail cars, | | 96 |
| Number of box freight cars, | | 8,869 |
| Number of stock cars, | | 2,008 |
| Number of platform cars, | | 2,061 |
| Number of coal cars, | | 2,409 |
| Number of conductors' way cars, | | 257 |
| Other cars as follows: Pay, 2; derrick, 10; dumper, 144, | | 156 |
| Number of locomotives equipped with train-brake, | | 432 |
| Number of cars used in passenger trains equipped with train-brake, | | All. |
| What kind of train-brake is in use on your road? Westinghouse, with latest improvement. | | |
| Number of passenger train cars with Miller platform and buffer, | | All. |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 2,910,400 |
| Miles run by freight trains during the year, | 7,704,600 |
| Total mileage of trains earning revenue, | 10,615,000 |
| Miles run by work trains during the year, | 528,900 |
| Miles run by switching trains, | 4,090,000 |
| Total train mileage, | 15,233,900 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 6 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 198 |
| Average number of cars in freight trains, | 40 |
| Average weight of freight trains, exclusive of freight,—tons, | 609 |

*Passenger Traffic.*

| | | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|---|
| Number of through passengers carried, Buffalo & Chicago, | | 122,155 | | |
| Number of local passengers carried, | | 3,559,851 | | |
| Total number of passengers carried, | West, 1,880,984<br>East, 1,801,022 | 3,682,006 | | |
| Total passenger mileage, or passengers carried one mile, | | | 207,953,215 | |
| Average distance traveled by each passenger, | | | 56.5 | |
| Average amount received from each passenger, | | | | 1.12 |
| Highest rate of fare per mile, for any distance, | | | | 0.05 |
| Lowest rate of fare per mile, for any distance, | | | | 0.01 |
| Average rate of fare per mile, for through passengers, | | | | 0.01.22 |
| Average rate of fare per mile, for local passengers, | | | | 0.02.34 |
| Average rate of fare per mile, for all passengers, | | | | 0.01.98 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 1,299,302 | |
| Number of tons of local freight carried, | 7,865,206 | |
| Total tons of freight carried, | 9,164,508 | |
| Total mileage of through freight, | | 699,024,476 |
| Total mileage of local freight, | | 1,322,728,383 |
| Total freight mileage, or tons carried one mile, | | 2,021,752,859 |
| Average ton haul for through freight, | | 538. |
| Average ton haul for local freight, | | 168.20 |
| Average ton haul for all freight, | | 220.60 |
| Average amount received for each ton haul, | | 1.36.10 |
| Average rate per ton per mile, received for through freight, | | 0.46 |
| Average rate per ton per mile, received for local freight, | | 0.70 |
| Average rate per ton per mile, received for all freight, | | 0.61 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 1,509,444 | 16.47 |
| Flour, | 347,865 | 3.80 |
| Provisions (beef, pork, lard, etc.), | 242,430 | 2.64 |
| Animals, | 563,555 | 6.15 |
| Other agricultural products, | 375,654 | 4.10 |
| Lumber and forest products, | 1,015,199 | 11.08 |
| Coal, | 1,592,070 | 17.37 |
| Plaster, | 25,460 | .28 |

| | Tons. | Per Cent. |
|---|---|---|
| Salt, | 74,780 | .82 |
| Petroleum, | 307,672 | 3.36 |
| Railroad iron,—iron and steel rails, | 160,406 | 1.75 |
| Pig and bloom iron, | 273,613 | 2.98 |
| Other iron and castings, | 398,471 | 4.35 |
| Ores, | 180,037 | 1.96 |
| Stone, sand, and brick, | 289,673 | 3.16 |
| Manufactures, | 413,324 | 4.51 |
| *Merchandise and other articles not enumerated above, | 1,394,855 | 15.22 |
| Total tons carried, | 9,164,508 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American, United States, Union.

American pays $168 per day for 24,000 lbs. through freight between Cleveland and Buffalo, and from 15 to 75c. per 100 lbs. for way. United States pays $250 per day for 16,000 lbs. through freight between Cleveland & Chicago, and from 10 to 70c. per 100 lbs. for way.

Cars furnished by railway company.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Red Line, Buffalo, N. Y.

White Line, Buffalo, N. Y.

Hoosac Tunnel Line, Rochester, N. Y.

South Shore Line, Cleveland, O.

Midland Line, Cleveland, O.

Co-operative lines. Each railroad company interested furnishes its quota of cars, and shares in earnings and expenses.

Merchants' Despatch, New York, N. Y.

Empire Line, Philadelphia, Pa.

Stock companies. Receive the current rate of mileage, ⅞c., on their cars, and a commission on all business they secure. Maintain their own cars.

The above are all considered fast freight lines, and are treated alike as to speed, order of transportation, etc.

---

* Includes:

| | |
|---|---|
| Lime | 45,866 tons. |
| Cement | 27,372 tons. |
| Coke | 83,645 tons. |
| Miscellaneous | 1,237,972 tons. |
| | 1,394,855 tons. |

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Merchants' Despatch, New York, | 112,863 39 |
| Empire Line, Philadelphia, | 96,048 62 |
| Standard Oil Company, Cleveland, | 18,522 26 |
| | $227,434 27 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Sleeping cars and drawing-room cars; owned by the New York Central Sleeping Car Company.

They put on their cars at their own cost and maintain the interior, receiving therefor the current rates for berths and seats.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Main line, twice daily each way in postal cars; branches, once in baggage cars.

| | |
|---|---|
| Route 6,052, Buffalo & Chicago, | $340,743 44 |
| Route 6,052, Buffalo R. P. O. cars, | 118,471 24 |
| Route 21,007, Elyria and Millbury, | 38,979 60 |
| Route 21,007, Elyria R. P. O. cars, | 10,503 60 |
| Route 21,045, Toledo & Elkhart, | 58,009 64 |
| Route 21,045, Toledo R. P. O. cars, | 21,496 00 |
| Route 8,045, Ashtabula & Oil City, | 5,240 44 |
| Route 21,062, Mahoning Coal R., | 2,826 52 |
| Route 24,001, Toledo & Detroit, | 10,987 96 |
| Route 24,002, Monroe & Adrian, | 2,441 24 |
| Route 24,003, Adrian & Jackson, | 3,110 28 |
| Route 24,004, W. Pigeon & Grand Rapids, | 8,809 28 |
| Route 24,005, Jonesville & Lansing, | 2,913 96 |
| Route 24,036, Chicago & Canada Southern Railway, | 3,787 04 |
| Total, | $628,320 24 |

*Telegraph.*

Number of miles of telegraph owned by company,—wires. 1,327

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Western Union, 7,874.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

### KILLED.

January 14. P. Moran, trespasser, G. T. Junction, ran between cars while switching; own fault.

January 20. W. Pettit, fireman, Clayton, jumped from engine in motion; own fault.

March 16. J. Frazier, trespasser, Detroit, struck by an engine; own fault.

March 30. W. Molkowiski, trespasser, Ecorces, struck by an engine, drunk; own fault.

April 21. J. Bradley, trespasser, Coldwater, jumped on train, fell; own fault.

May 21. C. Adams, trespasser, Coldwater, jumped on train, fell; own fault.

June 27. P. Shaughnessy, tramp, Jackson, drunk on track, run over; own fault.

September 24. E. Perry, switchman, Detroit, asleep on track, head cut off; own fault.

October 3. G. Malorey, tramp, near Batavia, walking on track, struck by an engine; own fault.

November 1. J. Kamsky, mason, Detroit, struck by a car; unavoidable.

November 27. A Miller, tramp, Riga, jumped off train in motion; own fault.

November 28. H. Hunt, trespasser, Detroit, suicide, threw himself under train.

December 6. A. Schultze, trespasser, Detroit, drunk, struck by engine; own fault.

December 28. A. Jones, tramp, Springville, walking on track; own fault.

December 30. M. F. Jordan, trespasser, Hudson, driving across track; own fault.

### INJURED

January 13. C. A. Dickenson, fireman, Blissfield, fell from engine tank, head severely injured; accidental.

January 23. F. Stoner, brakeman, Monroe, slipped, struck by pilot of engine, leg broken; own fault.

January 24. E. R. Sullivan, yardmaster, Grand Rapids, coupling cars, badly squeezed; own fault.

February 5. A. G. Ernsham, brakeman, Ecorces, coupling cars, hand badly crushed; own fault.

February 5. C. Lovejoy, fireman, Adrian, coupling cars, chest injured, ribs broken; own fault.

February 18. L. Hubert, switchman, Kalamazoo, coupling cars, fingers amputated; own fault.

March 1. J. Calkins, brakeman, Jackson, coupling cars, hand smashed; own fault.

March 6. C. Fenwick, brakemann, D. & M. Junction, coupling cars, badly crushed; own fault.

March 12. G. W. Barney, freight conductor, G. T. Junction, coupling cars, thumb off; own fault.

March 16. R. Malhum, tramp, Detroit, struck by engine, internal injury; own fault.

April 10. A. W. Sawyer, tramp, Monroe, struck by hand car, internal injury; own fault.

April 12. O. J. Jones, brakeman, Monroe, coupling cars, head caught, concussion of brain; own fault.

May 18. T. Cushesky, Mich. C. W. Co., G. T. Junction, repairing cars, cars pushed over him, internally injured; own fault.

May 30. G. W. Davis, telegraph repairer, Deerfield, thrown from R. R. velocipede, leg broken; own fault.

June 13. A. Tate, switchman, Kalamazoo, coupling cars, hand badly smashed; own fault.

July 6. A. S. Wells, yardmaster, Jackson, coupling cars, collar bone broken; own fault.

July 11. J. Burnes, tramp, Alexis Junction, drunk, asleep on track, foot off; own fault.

July 16. M. McCarty, switchman, Adrian, coupling cars, hand smashed; own fault.

July 22. J. Shean, switchman, D. & M. Junction, coupling cars, finger off; own fault.

July 31. J. Eil, C. S. switchman, Wyandotte, attempt to cross track ahead of train, struck by engine, arm broken; own fault.

August 29. J. H. Schott, brakeman, Sturgis, fell off top of car, wrist broken, hip-bruised; own fault.

September 1. T. Grootnet, fireman, Hilliard's, coupling cars; hand crushed; own fault.

September 5. J. Bossenger, engineer, Chandler's, attempting to put out fire fell from top of car, two ribs and shoulder broken; unavoidable.

September 9. J. Hayes, passenger, near Quincy, drunk, fell off train, head badly bruised; own fault.

September 22. W. J. Waller, switchman, G. T. Junction, coupling cars, hand smashed; own fault.

September 22. C. Miller, switchman, G. T. Junction, fell under hand-car, internal injury; own falt.

October 13. J. C. Norcutt, freight conductor, Bronson, attempting to get off train, fell, foot amputated; own fault.

October 24. F. Wagner, tramp, Jackson, run over by engine, both legs cut off; own fault.

November 1. Miss A. Cook, trespasser, Detroit, tired of life, threw herself under train, leg amputated; own fault.

November 3. E. Odeen, fireman, White Pigeon, attempting to board passing train, legs cut off; own fault.

November 12. E. Smith, yardmaster, Detroit, coupling cars, leg smashed; own fault.

November 26. D. Sample, passenger, Clayton, jumped from train, hand broken; own fault.

December 19. F. Smith, switchman, White Pigeon, coupling cars, hand smashed; own fault.

December 20. J. R. Parsell, tramp, Grand Trunk Junction, struck by an engine, leg broken; own fault.

## TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | 16 | |
| Derailments | | | | | | |
| Falling from trains | | | | 1 | 1 | |
| Frogs | | | | | | |
| Getting on and off trains | | 1 | 2 | 1 | 2 | |
| Highway crossings | | | 1 | | | 1 |
| Miscellaneous | | 2 | | | 6 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | 9 | | | 6 |
| Total | | 3 | 12 | 2 | 25 | 7 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | — |
| Same for Michigan, | 15 |
| Number of persons injured during the year on the entire line, | — |
| Same for Michigan, | 34 |
| Number of casualties purely accidental in Michigan, | 2 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 47 |
| Persons killed or injured in Michigan while intoxicated, | 4 |
| Trespassers and tramps killed or injured in Michigan, | 18 |
| Suicides in Michigan, | 1 |

STATE OF OHIO,
COUNTY OF CUYAHOGA, } ss.

John Newell, General Manager, and C. P. Leland, Auditor, of the Lake Shore & Michigan Southern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, JOHN NEWELL,
C. P. LELAND,

Subscribed and sworn to before me, this 21st day of April, A. D. 1882.
[L. S.] NICHOLAS BARTLETT,
*Notary Public.*

# ANNUAL REPORT

OF THE

# DETROIT, HILLSDALE & SOUTHWESTERN RAILWAY COMPANY,

*For the Period commencing September 19, 1881, and ending December 31, 1881.*

[LAKE SHORE & MICHIGAN SOUTHERN RAILWAY COMPANY, LESSEES.]

## GENERAL REMARKS.

The road was operated by the corporation owning it until September 19, 1881, when it was leased to the Lake Shore & Michigan Southern Railway Company. For corporate organization and other particulars not included here see the report of the Detroit, Hillsdale & Southwestern Railway Company for the portion of the year previous to its lease.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $19,115 56 |
| Total expense, including taxes, | | $21,153 11 |
| Net deficit, | | $2,037 55 |
| Balance for the year, | $2,037 55 | |
| Balance forward to next year, | | $2,037 55 |
| | $2,037 55 | $2,037 55 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | |
|---|---|
| From local passengers, | $7,157 39 |
| From express and baggage, | 797 78 |

| | | |
|---|---|---|
| From mails, | $756 03 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $8,711 20 |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $10,404 36 | |
| Total earnings freight department, | | $10,404 36 |
| Total transportation earnings, | | $19,115 56 |
| Proportion of earnings for Michigan, | $19,115 56 | |
| Total income from all sources, | | $19,115 56 |
| Proportion of income for Michigan, | $19,115 56 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $4,690 62 |
| Renewal of rails, | 2,490 84 |
| Renewal of ties, | 1,186 54 |
| Repairs of bridges, including culverts and cattle guards, | 847 69 |
| Repairs of fences, road crossings, and signs, | 19 45 |
| Repairs of buildings, | 188 96 |
| Total, | $9,424 10 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $2,650 83 |
| Repairs of passenger cars, | 303 46 |
| Repairs of freight cars, | 149 25 |
| Total, | $3,103 54 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $2,056 99 |
| Oil and waste, | 190 82 |
| Locomotive service, | 1,911 75 |
| Passenger train service, | 677 93 |
| Passenger train supplies, | 18 42 |
| Freight train service, | 536 07 |
| Freight train supplies, | 24 44 |
| Telegraph expenses (maintenance and operating), | 755 83 |
| Agents and station service, | 1,293 30 |
| Station supplies, | 291 57 |
| Total, | $7,757 12 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $523 78 |
| Stationery and printing, | 344 57 |
| Total, | $868 35 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $9,424 10 |
| Maintenance of motive power and cars, | 3,103 54 |
| Conducting transportation, | 7,757 12 |
| General expenses, including taxes, | 868 35 |
| Total operating expenses and taxes, | $21,153 11 |

DESCRIPTION OF ROAD.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 64 80 | |
| Total length completed, | | 64 80 |
| Total length of road belonging to this company, | | 64 80 |
| Total length of road belonging to this company in Michigan, | 64 80 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 3 33 |
| Same in Michigan, | 3 33 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 68 13 |
| Same in Michigan, | 68 13 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with iron rails, weight per yard —, | | 68 13 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, | 22; aggregate length, | 3,357 |
| Total, | 22 | 3,357 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 58 |
| Tile, number, | 2 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 146 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Toledo & Ann Arbor R. R., at Pittsfield.
Lake Shore & Michigan Southern R. R., at Manchester and Hillsdale.

What railroads cross your road either over or under your grade in this State, and where?
Lake Shore & Michigan Southern R. R., at Hillsdale.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 64 |
| Number of crossings of highways over railroad, | 1 |
| Number of highway bridges 18 feet above track, | 1 |
| Have safety-guards been erected at over-head obstructions, | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 14 |
| Same in Michigan, | 14 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 120 |
| Total miles, | 120 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 8 |
| Average length of sections,—miles, | 8 |
| Average number of men in each section gang, | 3 |
| Number of new ties put in whole line during the year, | 3,769 |
| Number of new ties put in track in Michigan, | 3,769 |
| Average number of new ties per mile of road, | 58 |
| New rails put in track—second hand rail: | |
| Iron [tons 69 $\frac{1,901}{10,000}$], miles, | 0.73 |
| Total miles of track laid with new rails, | 0.73 |

Between what points were new rails laid:
Wherever needed.

STATE OF OHIO,
COUNTY OF CUYAHOGA, } ss.

P. P. Wright, General Superintendent, and C. P. Leland, Auditor, of the Lake Shore & Michigan Southern Railway Co., Lessee of the Detroit, Hillsdale & Southwestern Railroad being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, P. P. WRIGHT,
C. P. LELAND.

Subscribed and sworn to before me, this 25th day of July, A. D. 1882.
[L. S.] N. BARTLETT,
*Notary Public.*

# ANNUAL REPORT

OF THE

# DETROIT, MONROE & TOLEDO RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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[OWNED AND OPERATED BY THE LAKE SHORE & MICHIGAN SOUTHERN RAILWAY COMPANY.]

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* AMASA STONE, Cleveland, Ohio.
*Secretary and Treasurer,* C. P. LELAND, Cleveland, Ohio.
*General Manager,* JOHN NEWELL, Cleveland, Ohio.
*General Superintendent,* P. P. WRIGHT, Cleveland, Ohio.
*Division Superintendent,* T. J. CHARLESWORTH, Detroit, Mich.
*Chief Engineer,* L. H. CLARKE, Cleveland, Ohio.
*Superintendent of Telegraph,* WM. KLINE, Toledo, Ohio.
*Auditor,* C. P. LELAND, Cleveland, Ohio.
*General Passenger Agent,* W. P. JOHNSON, Chicago, Ill.
*General Freight Agent,* GEO. H. VAILLANT, Cleveland, Ohio.
*Attorney,* ASHLEY POND, Detroit, Mich.

## DIRECTORS.

AUGUSTUS SCHELL, New York, N. Y.
E. D. WORCESTER, New York, N. Y.
W. L. SCOTT, Erie, Pa.
AMASA STONE, Cleveland, Ohio.
H. B. PAYNE, Cleveland, Ohio.
CHAS. PAINE, New York, N. Y.
ADDISON HILLS, Cleveland, Ohio.
C. P. LELAND, Cleveland, Ohio.
ALBERT KEEP, Chicago, Ill.
[One vacancy.]

Term expires when successors are elected.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 2 |
| Number of stockholders in Michigan at same date, | 1 |
| Amount of full paid stock held in Michigan at same date, | $100 00 |

Date of of annual meeting of stockholders,—fourth Tuesday in April.
Fiscal year of company ends calendar year.
General offices of the company are located at Cleveland, O.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $527,384 22 |
| Total expense, including taxes, | $339,163 86 | |
| Net income, | | $188,220 36 |
| Interest on funded debt, | 64,680 00 | |
| Balance for the year, | | $123,540 36 |
| Balance to accounts of L. S. & M. S. Railway Co., lessee and owner, | $123,540 36 | |
| | $123,540 36 | $123,540 36 |

## ANALYSIS OF CAPITAL STOCK.*

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $414,100 00 |
| Par value of shares, | $100 00 | |
| Amount issued, $414,100.00 No. of shares, 4,141 | | |
| Amount paid in on common, | $414,100 00 | |
| Total amount paid in as per books of the company, | | 414,100 00 |
| Amount paid in per mile of road owned by company, | 6,640 47 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1906, interest 7 per cent, payable February and August, | $924,000 00 |
| Total amount of funded debt, | $924,000 00 |
| Total debt liabilities, | $924,000 00 |

* Entire capital stock, except one share, owned by L. S. & M. S. R'y Co.

| | |
|---|---|
| Amount of debt liabilities per mile of road [62.36 miles], | $14,832 22 |

COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $1,381,600 00 |
| Average cost of construction per mile of road (not including sidings), [62.36 miles], | 22,155 22 |
| Proportion of cost of construction for Michigan, | 1,196,381 88 |

*Cost of Equipment.*

Owned and reported by L. S. & M. S. R'y Co.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $1,381,600 00 |
| Average cost of same per mile, | 22,155 22 |
| Proportion of cost of road and equipment for Michigan, | 1,196,381 88 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Land in Detroit, | $36,000 00 |
| Passenger and freight stations, wood-sheds, and water stations, | 30,828 82 |
| Engine-houses, car-sheds, and turn-tables, | 6,876 20 |
| Any other expenditures charged to property account (specifying the same): | |
| New river dock, | 12,294 98 |
| Total charges to property account during the year, | $86,000 00 |
| Net addition to property account for the year, | $86,000 00 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $105,473 56 | |
| From express and baggage, | 7,008 08 | |
| From mails, | 10,987 96 | |
| Total earnings, passenger department, | | $123,469 60 |
| Earnings per train mile run [70,887 miles], | $1 74 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $403,914 62 | |
| Total earnings, freight department, | | $403,914 62 |
| Total transportation earnings, | | $527,384 22 |

| | | |
|---|---|---|
| Earnings per train mile run [182,462 miles], | $2 21.3 | |
| Earnings per mile of road operated [65 miles], | $8,113 60 | |
| Earnings per train mile run, from all trains earning revenue [253,349 miles], | $2 08.1 | |
| Proportion of earnings for Michigan, | $438,134 58 | |
| Total income from all sources, | | $527,384 22 |
| Proportion of income for Michigan, | $438,134 58 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $43,233 69 |
| Renewal of rails, | 20,181 80 |
| Renewal of ties, | 14,248 18 |
| Repairs of bridges, including culverts and cattle guards, | 1,319 39 |
| Repairs of fences, road-crossings, and signs, | 2,777 07 |
| Repairs of buildings, | 3,059 08 |
| Total, | $84,819 21 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $18,063 76 |
| Repairs of passenger cars, | 5,387 41 |
| Repairs of freight cars, | 16,056 65 |
| Total, | $39,507 82 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $35,967 59 |
| Water-supply, | 1,524 64 |
| Oil and waste, | 3,586 21 |
| Locomotive service, | 25,740 85 |
| Passenger train service, | 5,273 84 |
| Passenger train supplies, | 685 60 |
| Freight train service, | 17,034 50 |
| Freight train supplies, | 474 65 |
| Mileage of freight cars (debit balance), | 14,344 84 |
| Telegraph expenses (maintenance and operating), | 7,175 32 |
| Damage and loss of freight and baggage, | 1,476 67 |
| Damages to property and cattle, | 1,160 24 |
| Personal injuries, | 632 86 |
| Agents and station service, | 61,545 71 |
| Station supplies, | 2,373 23 |
| Total, | $178,996 75 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $8,701 84 |
| Salaries of clerks in general offices, | | |
| Law expenses, | | 1,371 20 |
| Stationery and printing, | | 2,056 80 |
| Outside agencies and advertising, | | 7,330 64 |
| Contingencies, | | 1,054 77 |
| Taxes in Michigan, | $10,324 83 | |
| Taxes in other States,—Ohio estimated, | 5,000 00 | 15,324 83 |
| Total, | | $35,840 08 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $84,819 21 |
| Maintenance of motive power and cars, | 39,507 82 |
| Conducting transportation, | 178,996 75 |
| General expenses, including taxes, | 35,840 08 |
| Total operating expenses and taxes, | $339,163 86 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $5,217 90 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [253,349 miles], | $1 33.8 | |
| Proportion of operating expenses and taxes for Michigan, | $289,767 01 | |
| Per centage of expenses to earnings, [64.31] | | |
| Net earnings per mile of road, | $2,895 70 | |
| Net earnings per train mile, | 0 74.3 | |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $1,381,600 00 |
| Total assets, | $1,381,600 00 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $414,100 00 |
| Funded debt, | 924,000 00 |
| Lake Shore & M. S. R'y Co., balance in account, | 43,500 00 |
| Total liabilities, | $1,381,600 00 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Monroe to Detroit, December 25, 1857.
From Monroe to Toledo, July 1857.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 54 67 | |
| Length completed in Ohio, | 7 69 | |
| Total length completed, | | 62 36 |
| Total length of road belonging to this company, | | 62 36 |
| Total length of road belonging to this company in Michigan, | 54 67 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 18 94 |
| Same in Michigan, | 16 53 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 81 30 |
| Same in Michigan, | 71 20 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 60 lbs., | | 56 22 |
| Total length of tracks laid with iron rails, weight per yard, 60 lbs. | | 25 08 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 8; aggregate length, feet, | | 1,008 |
| Wooden trestles, number of, 2; aggregate length, feet, | | 658 |
| Total, | 16 | 1,666 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 76 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 155 |
| Number of cattle guards renewed during the year, | 14 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Chicago & Canada Southern R. R., at Chandler.
Michigan Central R. R., at Grand Trunk Junction.
Detroit & Bay City R. R., near Grand Trunk Junction.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 103 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 19 |
| Have safety-guards been erected at over-head obstructions? | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 13 |
| Same in Michigan, | 11 |

*Employés.*

Reported with those of L. S. & M. S. R'y Co.

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 103 |
| What is the average cost per rod? | $1 10 | |
| The total cost of same? | $36,256 00 | |
| How many miles of new fencing have you built during the year? | | 2 26 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 9 |
| Average length of sections (miles), | 6.08 |
| Average number of men in each section gang, | 5 |
| Number of new ties put in whole line during the year, | 28,697 |
| Number of new ties put in track in Michigan, | 26,854 |
| Average number of new ties per mile of road, | 460 |
| New rails put in track: | |
| Iron [tons 74.72] miles,—second hand rail, | 1.72 |
| Steel [tons 934.37] miles, | 9.91 |
| Total miles of track laid with cut rails, | 11.63 |

Between what points were new rails laid:

Wherever needed, in main track, and in new side track at Detroit, Grand Trunk Junction, etc.

*Bridges and Culverts.*

| | |
|---|---|
| Timber culverts replaced with timber, | 1 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 70,887 |
| Miles run by freight trains during the year, | 182,462 |
| Total mileage of trains earning revenue, | 253,349 |
| Miles run by work trains during the year, | 16,489 |
| Miles run by switching trains, | 140,702 |
| Total train mileage, | 410,540 |

*Passenger Traffic.*

Included with report of L. S. & M. S. R'y Co.

*Freight Traffic.*

Included in report of L. S. & M. S. R'y Co.

*Tonnage of Articles Transported.*

Included in report of L. S. & M. S. R'y Co.

STATE OF OHIO, }
COUNTY OF CUYAHOGA, } ss.

Amasa Stone, President, C. P. Leland, Secretary, of the Detroit, Monroe & Toledo Railroad Co., being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), AMASA STONE,
C. P. LELAND.

Subscribed and sworn to before me, this 20th day of April, A. D. 1882.

[L. S.] NICHOLAS BARTLETT,
*Notary Public.*

ANNUAL REPORT

OF THE

# KALAMAZOO, ALLEGAN & GRAND RAPIDS RAILROAD COMPANY.

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

This road is leased to the Lake Shore & Michigan Southern Railway Company for $103,800.00 per annum, which rental is made up as follows:

| | |
|---|---|
| Interest on bonds, $840,000, at 8 per cent, . . . . | $67,200 00 |
| Dividend on stock, $610,000, at 6 per cent, . . . . | 36,600 00 |
| | $103,800 00 |

The lessee also pays the taxes.

This road is operated as a part of the Lake Shore & Michigan Southern Railway system of 1,177.67 miles. All statistics not given here are included in the annual report of that company.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* J. H. WADE, Cleveland, Ohio.
*Secretary,* H. B. PAYNE, Cleveland, Ohio.
*Treasurer,* W. S. JONES, Cleveland, Ohio.

## DIRECTORS.

J. H. WADE, Cleveland, O.
A. G. AMSDEN, Kalamazoo, Mich.
H. B. PAYNE, Cleveland, O.
J. M. JONES, Cleveland, O.
C. P. LELAND, Cleveland O.
W. S. JONES, Cleveland, O.
J. P. PERKINS, Cleveland, O.
GEO. F. ELY, Cleveland, O.
J. H. WADE, JR,, Cleveland, O.

Term expires 1st Wednesday in May, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 33 |
| Number of stockholders in Michigan at same date, | 15 |
| Amount of full-paid stock held in Michigan at same date, | $210,100 |

Date of annual meeting of stockholders,—first Wednesday in May.
Fiscal year of company ends calendar year.
General offices of the company are located at Cleveland, O.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $154,129 66 |
| Total expense, including taxes, | $151,286 67 | |
| Net income, | | $2,842 99 |
| Interest on funded debt, | 67,200 00 | |
| Deficit, | 64,357 01 | |
| Dividends declared (6 per cent). | $36,600 00 | |
| Balance for the year, | $100,957 01 | |
| Balance to accounts L. S. & M. S. R'y Co., | | 100,957 01 |
| | $100,957 01 | $100,957 01 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $610,000 00 |
| Par value of shares, | $100 00 | |
| Amount issued, $610,000.00, No. of shares, 6,100 | | |
| Amount paid in on common, | $610,000 00 | |
| Total amount paid in as per books of the Company, | | $610,000 00 |
| Amount paid in per mile of road owned by company, 58.42 miles, | $10,441 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1888, interest 8 per cent, payable January and July), | $840,000 00 |
| Total amount of funded debt, | $840,000 00 |
| Total debt liabilities, | $840,000 00 |

| | | |
|---|---|---|
| Amount of debt liabilities per mile of road [58.42 miles], | $14,378 00 | |

COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $1,450,000 00 |
| Average cost of construction per mile of road (not including sidings), [58.42 miles], | 24,820 00 |
| Proportion of cost of construction for Michigan, | 1,450,000 00 |

*Cost of Equipment.*

Owned and reported by L. S. & M. S. R'y Co., Lessee.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $1,450,000 00 |
| Average cost of same per mile, | 24,820 00 |
| Proportion of cost of road and equipment for Michigan, | 1,450,000 00 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $59,102 82 | |
| From express and baggage, | 1,497 10 | |
| From mails, | 5,435 51 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $66,035 43 |
| Earnings per train mile run [74,920 miles], | $0 88.1 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $88,094 23 | |
| Total earnings, freight department, | | $88,094 23 |
| Earnings per train mile run [71,991 miles], | $1 22.3 | |
| Total transportation earnings, | | $154,129 66 |
| Earnings per mile of road operated [58.42 miles], | $2,638 25 | |
| Earnings per train mile run, from all trains earning revenue [146,911 miles], | $1 04.9 | |
| Proportion of earnings for Michigan,—all, | 154,129 66 | |
| Total income from all sources, | | $154,129 66 |
| Proportion of income for Michigan, | 154,129 66 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $26,546 98 |
| Renewal of rails, | 15,737 70 |
| Renewal of ties, | 11,408 19 |
| Repairs of bridges, including culverts and cattle guards, | 2,736 98 |
| Repairs of fences, road-crossings, and signs, | 909 15 |
| Repairs of buildings, | 2,359 01 |
| Total, | $59,698 01 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $8,064 62 |
| Repairs of passenger cars, | 5,693 92 |
| Repairs of freight cars, | 6,335 20 |
| Total, | $20,093 74 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $10,511 66 |
| Water-supply, | 573 91 |
| Oil and waste, | 1,048 08 |
| Locomotive service, | 8,415 50 |
| Passenger train service, | 4,163 00 |
| Passenger train supplies, | 200 37 |
| Freight train service, | 8,686 00 |
| Freight train supplies, | 240 00 |
| Mileage of freight cars (debit balance), | 4,192 34 |
| Telegraph expenses (maintenance and operating), | 3,825 00 |
| Damage and loss of freight and baggage, | 431 56 |
| Damages to property and cattle, | 339 08 |
| Personal injuries, | 184 96 |
| Agents and station service, | 17,986 97 |
| Station supplies, | 693 58 |
| Total, | $61,492 01 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, Salaries of clerks in general offices, | $2,543 15 |
| Law expenses, | 400 74 |
| Rents, | 961 05 |
| Stationery and printing, | 601 11 |
| Outside agencies and advertising, | 2,142 41 |
| Contingencies, | 308 26 |
| Taxes in Michigan, | 3,046 19 |
| Total, | $10,002 91 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $59,698 01 |
| Maintenance of motive power and cars, | 20,093 74 |
| Conducting transportation, | 61,492 01 |
| General expenses, including taxes, | 10,002 91 |
| Total operating expenses and taxes, | $151,286 67 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $2,589 64 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [146,911 miles], | $1 02.9 | |
| Proportion of operating expenses and taxes for Michigan, | $151,286 67 | |
| Per centage of expenses to earnings, | 98.16 | |
| Net earnings per mile of road, | $48 61 | |
| Net earnings per train mile, | $0 02 | |

## ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | 1,450,000 00 |
| Total assets, | $1,450,000 00 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $610,000 00 |
| Funded debt, | 840,000 00 |
| Total liabilities, | $1,450,000 00 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Kalamazoo to Grand Rapids, March 1, 1869.

MAIN LINE.

| | | |
|---|---|---|
| Length completed in Michigan, | 58 42 | |
| Total length completed, | | 58 42 |
| Total length of road belonging to this company, | | 58 42 |
| Total length of road belonging to this company in Michigan, | 58 42 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 9 55 |
| Same in Michigan, | 9 55 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 67 97 |
| Same in Michigan, | 67 97 | |

Gauge of track, 4 feet, 8½ inches.

| | |
|---|---|
| Total length of tracks laid with steel rails, weight per yard, 60 lbs., | 6 96 |
| Total length of tracks laid with iron rails, weight per yard, 50 and 60 lbs., | 61 01 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 1; aggregate length, feet, | 180 |
| Combination bridges, number of, | 1; aggregate length, feet, | 305 |
| Total, | 2 | 485 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 49 |
| Stone, number, | 3 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 142 |
| Number of cattle guards renewed during the year, | 23 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Michigan Central R. R., at Kalamazoo.
Grand Rapids & Indiana R. R., at Plainwell and Grand Rapids.
Grand Haven R. R., at Allegan.
Chicago & West Michigan R. R., at near Grandville.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 69 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 2 |
| Number of crossings of highways under railroad, | 1 |
| Have safety-guards been erected at over-head obstructions, | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 14 |
| Same in Michigan, | 14 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 116 |
| What is the average cost per rod? | $1 10 |
| The total cost of same? | $40,832 00 |
| How many miles of new fencing have you built during the year? | .09 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | None. |

## REPAIRS AND RENEWALS.

### *Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 13 |
| Average length of sections,—miles, | 4.5 |
| Average number of men in each section gang, | 3.9 |
| Number of new ties put in whole line during the year, | 25,747 |
| Number of new ties put in track in Michigan, | 25,747 |
| Average number cf new ties per mile of road, | 440 |
| New rails put in track: | |
| Iron [tons 297 $\frac{74}{100}$] miles, second hand rail, | 3.32 |
| Steel [tons 331 $\frac{768}{1,000}$] miles, | 3.52 |
| Total miles of track laid with cut rails, | 6.93 |
| Between what points are new rails laid: | |
| Wherever needed. | |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 74,920 |
| Miles run by freight trains during the year, | 71,991 |
| Total mileage of trains earning revenue, | 146,911 |
| Miles run by work trains during the year, | 12,514 |
| Miles run by switching trains, | 23,862 |
| Total train mileage, | 183,287 |

STATE OF OHIO, }
COUNTY OF CUYAHOGA, } ss.

Jeptha H. Wade, President of the Kalamazoo, Allegan & Grand Rapids Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed) JEPTHA H. WADE.

Subscribed and sworn to before me, this 20th day of April, A. D. 1882.

(L. S.) NICHOLAS BARTLETT,
*Notary Public.*

# ANNUAL REPORT

OF THE

# KALAMAZOO & WHITE PIGEON RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

The Lake Shore & Michigan Southern Railway Company owns the entire issue of capital stock ($230,900) of this road, and pays interest upon its bonds $44,000.00 per annum, the same as upon its own funded debt.

This road is operated as a branch of the L. S. & M. S. R'y, and all statistics, etc., not here given, are included in the report of that company.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JOHN NEWELL, Cleveland.
*Secretary and Treasurer,* C. P. LELALND, Cleveland.

## DIRECTORS.

JOHN NEWELL, Cleveland, Ohio.
E. D. WORCESTER, New York, N. Y.
D. P. CLAY, Grand Rapids, Mich.
J. H. WADE, Cleveland, Ohio.
AMASA STONE, Cleveland, Ohio.
JAMES MASON, Cleveland, Ohio.
A. G. AMSDEN, Kalamazoo, Mich.

Term expires when successor is elected.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election, . 1 (L. S. & M. S. R'y Co.)
Fiscal year of company ends, calendar year.
General offices of the company are located at L. S. & M. S. General Office, Cleveland.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $111,289 43 |
| Total expense, including taxes, | $103,975 32 | |
| Net income, | | $7,314 11 |
| Interest on funded debt, | 44,000 00 | |
| Balance for the year,—deficit, | $36,685 89 | |
| Balance to account of L. S. & M. S. R'y Co., | | 36,685 89 |
| | $36,685 89 | $36,685 89 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $230,900 00 |
| Par value of shares, | $100 00 | | |
| Amount issued, $230,900.00, No. of shares, | 2,309 | | |
| Amount paid in on common, | | $230,900 00 | |
| Total amount paid in as per books of the company, | | | 230,900 00 |
| Amount paid in per mile of road owned by company [36.57 miles], | | 6,295 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due July 1, 1890, interest 7 per cent, payable January and July), | $400,000 00 |
| First Mortgage Bonds (due July 1, 1887, interest 8 per cent, payable January and July), | 100,000 00 |
| First Mortgage Bonds (due July 1, 1887, interest 8 per cent, payable January and July), | 100,000 00 |
| Total amount of funded debt, | $600,000 00 |
| Total debt liabilities, | $600,000 00 |
| Amount of debt liabilities per mile of road [36.57 miles], | 16,357 65 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $610,000 00 |
| Average cost of construction per mile of road (not including sidings) [36.57 miles], | 16,926 78 |
| Proportion of cost of construction for Michigan, | 610,000 00 |

*Cost of Equipment.*

Owned and reported by L. S. & M. S. R'y.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $610,000 00 |
| Average cost of same per mile, | 16,926 78 |
| Proportion of cost of road and equipment for Michigan, | 610,000 00 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $42,798 58 | |
| From express and baggage, | 1,324 71 | |
| From mails, | 3,373 77 | |
| Total earnings, passenger department, | | $47,497 96 |
| Earnings per train mile run [47,795 miles], | $0 99.4 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $63,792 37 | |
| Total earnings, freight department, | | 63,792 37 |
| Earnings per train mile run [49,316 miles], | $1 29.3 | |
| Total transportation earnings, | | $111,289 43 |
| Earnings per mile of road operated [36.57 miles], | $3,043 19 | |
| Earnings per train mile run, from all trains earning revenue [97,111 miles], | $1 14.6 | |
| Proportion of earnings for Michigan,—all, | $111,289 43 | |
| Total income from all sources, | | $111,289 43 |
| Proportion of income for Michigan, | 111,289 43 | |

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $16,601 95 |
| Renewal of rails, | 12,047 73 |
| Renewal of ties, | 7,190 43 |
| Repairs of bridges, including culverts and cattle guards, | 1,875 62 |
| Repairs of fences, road crossings, and signs, | 532 25 |
| Repairs of buildings, | 1,777 01 |
| Total, | $40,024 99 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $5,149 05 |
| Repairs of passenger cars, | 3,632 80 |
| Repairs of freight cars, | 4,348 40 |
| Total, | $13,130 25 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $7,600 00 |
| Water-supply, | 268 65 |
| Oil and waste, | 756 84 |
| Locomotive service, | 6,076 98 |
| Passenger train service, | 3,013 08 |
| Passenger train supplies, | 144 69 |
| Freight train service, | 6,290 00 |
| Freight train supplies, | 162 00 |
| Mileage of freight cars (debt balance), | 3,027 36 |
| Telegraph expenses (maintenance and operating), | 2,765 70 |
| Damages and loss of freight and baggage, | 311 64 |
| Damages to property and cattle, | 244 86 |
| Personal injuries, | 133 56 |
| Agents and station service, | 12,988 71 |
| Station supplies, | 500 85 |
| Total, | $44,284 92 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, Salaries of clerks in general offices, | $1,836 45 |
| Law Expenses, | 289 38 |
| Stationery and printing, | 434 07 |
| Outside agencies and advertising, | 1,547 07 |
| Contingencies, | 222 60 |
| Taxes in Michigan, | 2,205 59 |
| Total, | $6,535 16 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $40,024 99 |
| Maintenance of motive power and cars, | | 13,130 25 |
| Conducting transportation, | | 44,284 92 |
| General expenses, including taxes, | | 6,535 16 |
| Total operating expenses and taxes, | | $103,975 32 |
| Operating expenses and taxes per mile of road, | $2,843 18 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [97,111 miles), | $1 07 | |

| | | |
|---|---|---|
| Proportion of operating expenses and taxes for Michigan, | | $103,975 32 |
| Per centage of expenses to earnings, | 93.44 | |
| Net earnings per mile of road, | | $200 01 |
| Net earnings per train mile, | | $0 07.6 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | |
|---|---|
| Construction account, | $610,000 00 |
| Total assets, | $610,000 00 |

### LIABILITIES.

| | |
|---|---|
| Capital stock, | $230,900 00 |
| Funded debt, | 600,000 00 |
| Total liabilities, | $830,900 00 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From White Pigeon to Kalamazoo, May 3, 1867.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 36 57 | |
| Total length completed, | | 36 57 |
| Total length of road belonging to this company, | | 36 57 |
| Total length of road belonging to this company in Michigan, | 36 57 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 4 90 |
| Same in Michigan, | 4 90 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 41 47 |
| Same in Michigan, | 41 47 | |
| Gauge of track, 4 feet, 8½ inches, | | |
| Total length of tracks laid with steel rails, weight per yard, 60 lbs., | | 4 95 |
| Total length of tracks laid with iron rails, weight per yard, 45, 50 and 60 lbs., | | 36 52 |
| Total miles of road operated by this company, | | 36 57 |
| Total miles of road operated by this company in Michigan, | 36 57 | |

*Number of Bridges and Trestles in Michigan,*

| | | |
|---|---|---|
| Wooden bridges, number of, | 1; aggregate length, feet, | 234 |
| Wooden trestles, number of, | 1; aggregate length, feet, | 185 |
| Total, | 2 | 419 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 37 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 95 |
| Number of cattle-guards renewed during the year, | 16 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Michigan Central R. R., at Three Rivers.
Chicago & Grand Trunk R. R., at Schoolcraft.
Grand Rapids & Indiana R. R., at Kalamazoo.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 49 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 1 |
| Number of crossings of highways over railroad, | 1 |
| Have safety-guards been erected at over-head obstructions, | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 7 |
| Same in Michigan, | 7 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 73 |
| What is the average cost per rod? | $1 10 | |
| The total cost of same? | 25,696 00 | |
| How many miles of new fencing have you built during the year? | | .06 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 8 |
| Average length of sections,—miles, | 4.6 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 16,222 |

| | |
|---|---|
| Number of new ties put in track in Michigan, | 16,222 |
| Average number of new ties per mile of road, | 443 |
| New rails put in track,—second hand rail: | |
| Iron [tons 189 $\frac{94}{100}$] miles, | 2 12 |
| Steel [tons 211 $\frac{651}{1,000}$] miles, | 2 24 |
| Total miles of track laid with new rails, | 4 41 |
| Between what points were new rails laid: | |
| Wherever needed. | |

*Bridges and Culverts.*

| | |
|---|---|
| Timber culverts replaced with timber,—number, | 3 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 47,795 |
| Miles run by freight trains during the year, | 49,316 |
| Total mileage of trains earning revenue, | 97,111 |
| Miles run by work trains during the year, | 7,983 |
| Miles run by switching trains, | 11,930 |
| Total train mileage, | 117,024 |

STATE OF OHIO, }
COUNTY OF CUYAHOGA, } ss.

John Newell, President, C. P. Leland, Secretary, of the Kalamazoo & White Pigeon Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, JOHN NEWELL,
C. P. LELAND.

Subscribed and sworn to before me, this 21st day of April, A. D. 1882.
[L. S.] NICHOLAS BARTLETT,
*Notary Public.*

# ANNUAL REPORT

OF THE

# NORTHERN CENTRAL MICHIGAN RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

The entire sum required for the construction of this road was advanced by the Lake Shore & Michigan Southern Railway Company.

The road constitutes the Lansing division of the line operated by the company, and all statistics and answers to questions omitted herein are supplied and included in the report made by the L. S. & M. S. R'y Company.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

Same as L. S. & M. S. R'y, owner.

## DIRECTORS.

AUGUSTUS SCHELL, New York, N. Y.
E. D. WORCESTER, New York, N. Y.
W. H. BROCKWAY, Albion, Mich.
S. V. IRWIN, Albion, Mich.
T. J. CHARLESWORTH, Lansing, Mich.
JOHN NEWELL, Chicago, Ill.
W. J. BAXTER, Jonesville, Mich.
H. B. PAYNE, Cleveland, Ohio.
I. M. CRANE, Eaton Rapids, Mich.
W. O. DONOUGHUE, Albion, Mich.

Term expires May 1, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election, . 1 (L. S. & M. S. R'y Co.)
Fiscal year of company ends December 31st.
General offices of the company are located at Cleveland, O.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $95,738 56 |
| Total expense, including taxes, | $78,274 30 | |
| Net income, | | $17,464 26 |
| Balance for the year, | | $17,464 26 |
| Balance to L. S. & M. S. Railway accounts, | $17,464 26 | |
| | $17,464 26 | $17,464 26 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $610,000 00 |
| Par value of shares (all owned by L. S. and M. S. R'y Co.,) | —— | |
| Amount paid in on shares not issued (Number, 6,100), | $610,000 00 | |
| Total amount paid in as per books of the company, | | $610,000 00 |
| Amount realized in cash, | $610,000 00 | |
| Amount paid in per mile of road owned by company (61.14 miles), | 9,977 12 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1903, interest 8 per cent, payable May and November), all owned by L. S. & M. S. R'y Co., none ever sold, | $1,525,000 00 |
| Total amount of funded debt, | $1,525,000 00 |
| Total debt liabilities, | $1,525,000 00 |
| Amount of debt liabilities per mile of road [61.14 miles], | $24,942 75 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $1,357,000 00 |
| Average cost of construction per mile of road (not including sidings), [61.14 miles], | 22,195 00 |
| Proportion of cost of construction for Michigan, | 1,357,000 00 |

*Cost of Equipment.*

Has none.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $1,357,000 00 |
| Average cost of same per mile, | 22,195 00 |
| Proportion of cost of road and equipment for Michigan, | 1,357,000 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $44,358 64 | |
| From express and baggage, | 935 18 | |
| From mails, | 2,913 96 | |
| Total earnings, passenger department, | | $48,207 78 |
| Earnings per train mile run [56,757 miles], | $0 84.9 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $47,530 98 | |
| Total earnings, freight department, | | $47,530 98 |
| Earnings per train mile run [46,463 miles], | $1 02.2 | |
| Total transportation earnings, | | $95,738 76 |
| Earnings per mile of road operated [61.14 miles], | $1,565 89 | |
| Earnings per train mile-run, from all trains earning revenue [103,220 miles], | $0 92.7 | |
| Proportion of earnings for Michigan, | 95,738 76 | |
| Total income from all sources, | | $95,738 76 |
| Proportion of income for Michigan, | $95,738 76 | |

### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $16,395 23 |
| Renewal of rails, | 275 28 |
| Renewal of ties, | 8,106 94 |
| Repairs of bridges, including culverts and cattle guards, | 1,233 23 |
| Repairs of fences, road crossings, and signs, | 1,077 00 |
| Repairs of buildings, | 925 12 |
| Total, | $28,012 80 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $3,350 83 |
| Repairs of passenger cars, | 4,313 53 |
| Repairs of freight cars, | 4,088 74 |
| Total, | $11,753 10 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $6,240 47 |
| Water-supply, | 46 22 |
| Oil and waste, | 452 10 |
| Locomotive service, | 6,211 54 |
| Passenger train service, | 1,961 50 |
| Passenger train supplies, | 1 87 |
| Freight train service, | 2,280 43 |
| Freight train supplies, | 15 35 |
| Mileage of freight cars (debit balance), | 2,604 07 |
| Telegraph expenses (maintenance and operating), | 2,005 30 |
| Damage and loss of freight and baggage, | 200 00 |
| Damages to property and cattle, | 16 00 |
| Personal injuries, | 200 00 |
| Agents and station service, | 9,529 74 |
| Station supplies, | 633 24 |
| Total, | $32,397 83 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, Salaries of clerks in general offices, | $1,978 53 |
| Law expenses, | 400 00 |
| Stationery and printing, | 400 00 |
| Outside agencies and advertising, | 1,350 00 |
| Contingencies, | 200 00 |
| Taxes in Michigan, | 1,782 04 |
| Total, | $8,110 57 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $28,012 80 |
| Maintenance of motive power and cars, | 11,753 10 |
| Conducting transportation, | 32,397 83 |
| General expenses, including taxes, | 6,110 57 |
| Total operating expenses and taxes, | $78,274 30 |

| | |
|---|---|
| Operating expenses and taxes per mile of road, | $1,280 24 |
| Operating expenses and taxes per train mile run, for trains earning revenue [103,220 miles], | $0 75.8 |

| | | |
|---|---|---|
| Proportion of operating expenses and taxes for Michigan, | | $78,274 30 |
| Per centage of expenses to earnings, | 81.75 | |
| Net earnings per mile of road, | $285 65 | |
| Net earnings per train mile, | $0 16.9 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | |
|---|---|
| Construction account, | $1,357,000 00 |
| Total assets, | $1,357,000 00 |

### LIABILITIES.

| | |
|---|---|
| Unfunded debt: | |
| Amount advanced for construction account by L. S. & M. S. R'y Company, | $1,357,000 00 |
| Total liabilities, | 1,357,000 00 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Jonesville to Lansing, January 13, 1873.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 61 14 | |
| Total length completed, | | 61 14 |
| Total length of road belonging to this company, | | 61 14 |
| Total length of road belonging to this company in Michigan, | 61 14 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 6 00 |
| Same in Michigan, | 6 00 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 67 14 |
| Same in Michigan, | 67 14 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 60 lbs., | | 20 |
| Total length of track laid with iron rails, weight per yard, 56 lbs., | | 66 94 |
| Total miles of road operated by this company, | | 61 14 |
| Total miles of road operated by this company in Michigan, | 61 14 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 4; aggregate length, feet, | 432 |
| Wooden trestles, number of, | 3; aggregate length, feet, | 235½ |
| Total, | 7 | 667½ |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 73 |
| Tile, number, | 8 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 147 |
| Number of cattle guards renewed during the year, | 5 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Michigan Central Air Line R. R., at Homer.
Michigan Central R. R., at Albion.
Grand River Valley R. R., at Eaton Rapids.
Chicago & Grand Trunk R. R., at Lansing.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 84 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 1 |
| Number of crossings of highways over railroad, | 1 |
| Number of highway bridges less than 18 feet above track, | 1 |
| Have safety-guards been erected at over-head obstructions? | Yes. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 12 |
| Same in Michigan, | 12 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 121 |
| What is the average cost per rod? | $1 10 |
| The total cost of same? | $42,592 00 |
| How many miles of new fencing have you built during the year? | 4.98 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | None. |

## REPAIRS AND RENEWALS.

### *Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 11 |
| Average length of sections, Michigan, miles, | 5.5 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 16,244 |
| Number of new ties put in track in Michigan, | 16,244 |
| Average number of new ties per mile of road, | 265 |
| New rails put in track: | |
| Iron [tons $13\frac{7,638}{10,000}$], miles, second hand rail: | 0.15 |
| Between what points were new rails laid: | |
| Wherever needed. | |

### *Bridges and Culverts.*

| | |
|---|---|
| Timber culverts replaced with timber, | 4 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 56,757 |
| Miles run by freight trains during the year, | 46,463 |
| Total mileage of trains earning revenue, | 103,220 |
| Miles run by work trains during the year, | 448 |
| Miles run by switching trains, | 7,751 |
| Total train mileage, | 111,419 |

STATE OF OHIO, }
COUNTY OF CUYAHOGA, } ss.

John Newell, General Manager, C. P. Leland, Auditor, of the Northern Central Michigan Railroad Co., being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), JOHN NEWELL,
C. P. LELAND.

Subscribed and sworn to before me, this 21st day of April, A. D. 1882.
[L. S.] NICHOLAS BARTLETT,
*Notary Public.*

# ANNUAL REPORT

OF THE

# MARQUETTE, HOUGHTON & ONTONAGON RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* GEORGE HIGGINSON, Boston.
*Secretary and Treasurer,* J. L. STACKPOLE, Boston.
*General Manager and General Superintendent,* SAMUEL SCHOCH, Marquette, Mich.
*Chief Engineer,* C. H. V. CAVIS, Marquette, Mich.
*General Passenger Agent,* S. J. LITTLE, Marquette, Mich.
*General Freight Agent,* A. S. PARKS, Marquette, Mich,
*Attorney,* W. P. HEALY, Marquette, Mich.

## DIRECTORS.

GEORGE HIGGINSON, Boston, Mass.
H. L. HIGGINSON, Boston, Mass.
T. L. HIGGINSON, Boston, Mass.
J. L. STACKPOLE, Boston, Mass.
JOHN P. LYMAN, Boston, Mass.
QUINCY A. SHAW, Boston, Mass.
GEORGE Z. SILSBEE, Boston, Mass.
SAMUEL SLOAN, New York City.
MOSES TAYLOR, New York City.
S. L. SMITH, Lansing, Mich.
JESSE SPALDING, Chicago, Ill.

Term expires July 21, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 189 |
| Number of stockholders in Michigan at same date, | 5 |

Amount of full-paid stock held in Michigan at same date, . $5,700 00
Date of annual meeting of stockholders,—July 21, 1881.
Fiscal year of company ends February 28th.
General offices of the company are located at Marquette, Michigan, 35 Congress St., Boston, Mass.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $893,638 92 |
| Total expense, including taxes, | $459,882 80 | |
| Net income, | | $433,756 12 |
| Interest on funded debt, | 272,892 00 | |
| Balance for the year, | | $160,864 12 |
| Balance (profit and loss) last year, | | 210,241 75 |
| Balance forward to next year, | 371,105 87 | |
| | $371,105 87 | $371,105 87 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $5,000,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $45,565,626 76; No. of shares, | 45,656 | | |
| Amount paid in on common, 23,066 shares, | | $2,306,600 00 | |
| Amount paid in on preferred, 22,590 $\frac{26}{100}$ shares, | | 2,259,026 67 | |
| Total amount paid in as per books of the company, | | | 45,565,626 67 |
| Amount paid in per mile of road owned by company, | | $50,443 33 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| 1st Mortgage Bonds (due June 1, 1892, interest eight per cent, payable June and December 1), | $1,445,500 00 |
| Mortgage Bonds (due March 1, 1908, interest 6 per cent, payable March and September, | 667,200 00 |

| | |
|---|---|
| M., H. & O. R. R., 5 per cent notes, due 1885, | $73,000 00 |
| Total amount of funded debt, | 2,185,700 00 |
| Other debts,—current credit balances, etc., | 61,905 08 |
| Total debt liabilities, | $2,247,605 08 |
| Amount of debt liabilities per mile of road [90.51 miles], | 24,832 76 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | 1,659,773 76 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $8,018,483 56 |
| Average cost of construction per mile of road not including sidings, [90.51 miles], | 88,592 24 |
| Proportion of cost of construction for Michigan, | 8,018,483 56 |

### *Cost of Equipment.*

| | |
|---|---|
| Total for equipment, | $1,157,399 91 |
| Average cost of equipment per mile of road operated by company [90.51 miles], | 12,787 54 |
| Proportion of cost of road and equipment for Michigan, | 1,157,399 91 |

### *Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $9,175,883 47 |
| Average cost of same per mile, 90.51 miles, | 101,379 78 |
| Proportion of cost of road and equipment for Michigan, | 9,175,883 47 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | | |
|---|---|---|---|
| From local passengers, | | $82,974 92 | |
| From through passengers, | | | |
| From express and baggage, | Expr'ss $2,466.88<br>Bagg'ge 1,423.30 | 3,890 18 | |
| From mails, | | 3,632 06 | |
| Total earnings, passenger department, | | | $90,497 16 |
| Earnings per train mile run [85,863 miles], | | $1 05 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, - - - - - - | $790,652 24 | |
| From through traffic, - - - - - | | |
| Total earnings freight department, - - - - - | | $790,652 24 |
| Earnings per train mile run [212,605 miles], - | $3 72 | |
| Total transportation earnings, - - - - - - | | $881,149 40 |
| Earnings per mile of road operated [90.51 miles], - - - - - - - - | $9,735 00 | |
| Earnings per train mile run, from all trains earning revenue [298,468 miles], - - | $2 96 | |
| Proportion of earnings for Michigan, - - | $881,149 40 | |
| Income from all other sources: | | |
| From telegraph line, rents, and miscellaneous sources, - - - - - - | 6,223 49 | |
| Royalties, - - - - - - - | 6,266 03 | |
| | | 12,489 52 |
| Total income from all sources, - - - - - - | | $893,638 92 |
| Proportion of income for Michigan, - - | $893,638 92 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, - - - - - - - | $92,404 47 |
| Repairs of buildings, and docks, - - - - - - - | 33,912 28 |
| Total, - - - - - - - - - - - - | $126,316 75 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, and stationary engines, - - - | $25,501 07 |
| Repairs of passenger cars, shop's operation, - - - | 37,642 94 |
| Repairs of freight cars, shop's operation, - - - - | 5,963 26 |
| Total, - - - - - - - - - - - - | $69,107 87 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, and oil and waste, - - - - - | $61,910 06 |
| Locomotive service, - - - - - - - - - - | 33,193 09 |
| Passenger train service, - - - - - - - - - | 10,132 49 |
| Freight train service, - - - - - - - - - - | 24,807 14 |
| Telegraph expenses (maintenance and operating), - - | 5,381 47 |
| Damage and loss of freight and baggage, - - - - | 344 19 |

| | |
|---|---|
| Damages to property and cattle, | $859 34 |
| Agents and station service, and station supplies, | 41,477 48 |
| Operation of ore and merchandise piers, | 35,774 21 |
| Total, | $213,879 74 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, and Boston office expenses, | $14,819 46 |
| Salaries of clerks in general offices, and supplies at Marquette, | 12,513 02 |
| Law expenses, | 439 49 |
| Contingencies, | 3,145 78 |
| Taxes in Michigan, | 19,660 96 |
| Total, | $50,578 71 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $126,316 75 |
| Maintenance of motive power and cars, | 69,107 87 |
| Conducting transportation, | 213,879 47 |
| General expenses, including taxes, | 50,578 71 |
| Total operating expenses and taxes, | $459,882 80 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $5,081 02 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [298,468 miles], | $1 54 | |
| Proportion of operating expenses and taxes for Michigan, | $459,882 80 | |
| Per centage of expenses to earnings, | 51 | |
| Net earnings per mile of road, | $4,792 35 | |
| Net earnings per train mile, | $1 42 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | | $8,018,483 56 |
| Equipment account, | | 1,157,399 91 |
| Other investments (specifying same): | | |
| M. H. & O. R. R. Preferred Stock, | | 1,102 63 |
| | | $9,176,986 10 |
| Cash items: | | |
| Cash, | $271,151 11 | |
| Bills receivable, | 45,010 68 | |
| Due from agents and companies, | 22,760 22 | |
| | | 338,922 01 |

| | | |
|---|---|---|
| Other assets: | | |
| Materials and supplies, | $23,911 92 | |
| Sinking funds: | | |
| Farmers' Loan and Trust Co., Trustees, | 22,833 48 | |
| New England Trust Co., Trustees, | 223,132 67 | |
| United States Mails, | 1,840 53 | |
| | | $271,718 60 |
| Total assets, | | $9,787,626 71 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, Common, | $2,306,600 00 | |
| Capital stock, Preferred, | 2,259,026 67 | |
| | | $4,655,626 67 |
| Marquette & Houghton 8 per cent bonds, | 1,445,500 00 | |
| M., H. & O. 8 per cent bonds, | 667,200 00 | |
| M., H. & O. 5 per cent notes, due 1885, | 73,000 00 | |
| | | 2,185,700 00 |
| | | $6,751,326 57 |
| Unfunded debt: | | |
| Interest unpaid—1 coupon 8 per cent bond, | $20 00 | |
| Vouchers and accounts, | 31,076 13 | |
| Other liabilities, | 20,324 50 | |
| Land Commissioner, | 63 62 | |
| General Passenger Agent, | 10,420 83 | |
| | | 61,905 08 |
| Lands—proceeds of all sales less taxes and expenses, | | 2,655,702 05 |
| Profit and loss, or income accounts, | $318,692 91 | |
| Total liabilities, | | $9,787,626 71 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Marquette to Ishpeming, 1857.
From Ishpeming to Champion, 1865.
From Champion to L'Anse, 1872.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 63 18 | |
| Total length completed, | | 63 18 |

BRANCHES.

| | | |
|---|---|---|
| Lake Branch, from Marquette to Carp Furnace, | 2 08 | |
| Rolling Mill and Milwaukee Branch, from Negaunee to Rolling Mill and Milwaukee Mine, | 2 47 | |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Saginaw Branch, from Ontonagon Junction to Saginaw Mine, | 2 06 | |
| Winthrop Branch, from Winthrop Junction to Winthrop Mine, | 1 87 | |
| Boston Branch, from Boston Junction to Boston Mine, | 2 06 | |
| Republic Branch, from Humboldt Junction to Republic Mine, | 10 15 | |
| West Republic Branch, from Republic to West Republic Mine, | 84 | |
| Champion Branch, from Champion Junction to Champion Mine, | 1 04 | |
| Northampton Branch, from Northampton Junction to Northampton Mine, | 2 09 | |
| Taylor Branch, from Taylor to Taylor Mine, | 2 30 | |
| Spurr Branch, from Spurr to Spurr Mine, | 37 | |
| Total length of branches owned by company, | | 27 33 |
| Total length of branches owned by company in Michigan, | 27 33 | |
| Total length of road belonging to this company, | | 90 51 |
| Total length of road belonging to this company in Michigan, | 90 51 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 25 37 |
| Same in Michigan, | 25 37 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 115 88 |
| Same in Michigan, | 115 88 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard 60 lbs., | | 30 19 |
| Total length of track laid with iron rails, weight per yard 58 and 60 lbs., | | 85 69 |
| Total miles of road operated by this company, | | 90 51 |
| Total miles of road operated by this company in Michigan, | | All. |

*Number of Bridges and Trestles in Michigan.*

| | | | |
|---|---|---|---|
| Wooden bridges, number of, | 39; | aggregate length, feet, | 2,812 |
| Iron bridges, number of, | 1; | aggregate length, feet, | 51 |
| Wooden trestles, number of, | 5; | aggregate length, feet, | 2,737 |
| Total, | 45 | | 5,600 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 200 |
| Stone, number, | 2 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 10 |
| Number of cattle guards renewed during the year, | None. |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Chicago & Northwestern R. R., at Lake Angeline.
What railroads cross your road either over or under your grade in this State, and where?
Chicago & Northwestern R. R., at Negaunee—under.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 31 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 4 |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | 2 |
| Number of crossings of highways under railroad, | 2 |
| Number of highway bridges 18 feet above track, | 2 |
| Number highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions, | No. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 12 |
| Same in Michigan, | 12 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials,—average, | 550 |
| Same in Michigan, | 550 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 26.20 |
| What is the average cost per rod? | $1 00 |
| The total cost of same? | $8,384 00 |
| How many miles of new fencing have you built during the year? | .60 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Marquette county, | 25.00 |
| In Baraga county, | 25.00 |
| Total miles, | 50.00 |

## REPAIRS AND RENEWALS.

### *Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 22 |
| Average length of sections,—miles, | 4.10 |
| Average number of men in each section gang, including foreman, | 5 |
| Number of new ties put in whole line during the year, | 36,223 |
| Number of new ties put in track in Michigan, | 36,223 |
| Average number of new ties per mile of road, | 312 |
| New rails put in track: | |
| Iron [tons 153] miles, | 1.60 |
| Steel [tons 621] miles, | 6.60 |
| Total miles of track laid with new rails, | 8.20 |
| Between what points were new rails laid: | |
| Clarksburg and Champion Junction. | |
| Post Republic Branch. | |
| Merchandise pier crossing D., M. & M. R. R. switch—Lake Branch. | |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 20 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 7 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 3 |
| Number of passenger cars—8-wheel, | 5 |
| Number of express and baggage cars, | 5 |
| Number of box freight cars, | 28 |
| Number of platform cars, | 92 |
| Number of ore cars, | 1,941 |
| Other cars as follows: | |
| Derrick, 2; snow-plow, 1; hand cars, 53; gravel cars, 15, | 71 |
| Number of locomotives equipped with train-brake, | 3 |
| Number of cars used in passenger trains equipped with train-brake, | 10 |
| What kind of train-brake is in use on your road? | Westinghouse. |
| Number of passenger train cars with Miller platform and buffer, | 10 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 85,863 |
| Miles run by freight trains during the year, | 212,605 |
| Total mileage of trains earning revenue, | 298,468 |
| Miles run by work trains during the year, | 25,431 |
| Miles run by switching trains, | 155,391 |
| Total train mileage, | 479,290 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3 |
| Average weight of passenger trains, exclusive of passengers,—pounds, | 80,000 |
| Average number of cars in freight trains, | 43 |
| Average weight of freight trains, exclusive of freight,—pounds, | 344,000 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 10,656 | | |
| Number of local passengers carried, | 114,688 | | |
| Total number of passengers carried, | 125,344 | | |
| Total passenger mileage, or passengers carried one mile, | | 2,033,885 | |
| Average distance traveled by each passenger, | | 16.22 | |
| Average amount received from each passenger, | | | 0.66.18 |
| Highest rate of fare per mile, for any distance, | | | 0.05 |
| Lowest rate of fare per mile, for any distance, | | | 0.03 |
| Average rate of fare per mile, for through passengers, | | | 0.04 |
| Average rate of fare per mile, for local passengers, | | | 0.04 |
| Average rate of fare per mile, for all passengers, | | | 04.07 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 68,102 | |
| Number of tons of local freight carried, | 851,937 | |
| Total tons of freight carried, | 920,039 | |
| Total mileage of through freight, | | 1,603,954 |
| Total mileage of local freight, | | 21,873,579 |
| Total freight mileage, or tons carried one mile, | | 23,477,533 |
| Average ton haul for through freight, | | 23.55 |
| Average ton haul for local freight, | | 25.68 |
| Average ton haul for all freight, | | 25.52 |
| Average amount received for each ton haul, | | 86.03 |
| Average rate per ton per mile, received for through freight, | | 06.23 |
| Average rate per ton per mile, received for local freight, | | 03.16 |
| Average rate per ton per mile, received for all freight, | | 03.34 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 4,068 | .44 |
| Flour, | 2,476 | .26 |
| Provisions (beef, pork, lard, etc.), | 1,050 | .11 |
| Animals, | 4,233 | .46 |
| Other agricultural products, | 1,081 | 12 |
| Lumber and forest products, | 27,592 | 3.00 |
| Coal, | 45,020 | 4.89 |
| Plaster, | 584 | .06 |
| Salt, | 183 | .02 |
| Railroad iron,—iron and steel rails, | 451 | .05 |
| Pig and bloom iron, | 7,704 | .85 |
| Other iron and castings, | 977 | .11 |
| Ores, | 801,660 | 87.13 |
| Stone and brick, | 4,131 | .45 |
| Manufactures,—articles shipped from point of production, | 1,844 | .20 |
| Merchandise and other articles not enumerated above, | 16,985 | 1.85 |
| Total tons carried, | 920,039 | 100. |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Co., 1c. per 100 lbs. per mile.

Miscellaneous business.

Take their freight at depots.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

None.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

Nothing.

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

No.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Compensation $3,632.06 per annum; terms of service, one mail daily each way. Extra service performed for which payment is refused.

*Telegraph.*

Number of miles of telegraph owned by company, . . . . 73

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

The Northwestern Telegraph Co. owns 63 miles.

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

KILLED.

May 11. William Tremewan, boy, Humboldt, trying to jump on car.

June 11. Patrick Casey, ore dock laborer, Marquette; lack of caution.

June 30. John Gilbert, employé, brakeman, Republic, breaking of coupling bar.

July 18. George Wilkes, section-foreman, Marquette, lack of caution.

July 26. Jerome Babcock, assistant yardmaster, Marquette, fell from train.

August 6. Frank Greenwald, brakeman, Ishpeming; lack of caution.

August —. Christine Malustein, trespasser, Marquette.

October 13. John Gregorie, brakeman, Champion Mine, supposed to have fallen from pilot of engine.

INJURED.

January 21. Clifford Monroe, brakeman, Negaunee, coupling.

February 10. D. Maloney, brakeman, Eagle Mills, coupling.

February 19. William Hodge, employé, Pendill Mine, Negaunee; carelessness.

June 8. George Crane, brakeman, Marquette, coupling.

June 8. Chas. Langtine, brakeman, Barm Mine, coupling.

June 16. Napoleon Reno, brakeman, Marquette; accidental.

July 29. Thos. Baldwin, brakeman, Republic, foot caught between cars.

August 30. M. O'Neil, brakeman, Negaunee, jumped from train.

September 29. Louis Willett, brakeman, Ishpeming, coupling.

September 30. Joseph Verden, brakeman, Republic, fell from engine.

October 22. Bartholomew Teahan, brakeman, Negaunee, fell from engine.

October 28. John Connors, brakeman, Champion Mine, caught between cars.

November 7. John Moore, brakeman, Marquette, caught between cars.

## TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | 1 | | | 8 | |
| Derailments | | | | | | |
| Falling from trains | | 2 | | | 2 | |
| Frogs | | | | | | |
| Getting on and off trains | | 1 | | | 1 | 1 |
| Highway crossings | | | | | | |
| Miscellaneous | | 2 | | | 1 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | 1 | | | |
| Trespassers | | | 1 | | | |
| Total | | 6 | 2 | | 12 | 1 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 8 |
| Same for Michigan, | 8 |
| Number of persons injured during the year on the entire line, | 13 |
| Same for Michigan, | 13 |
| Number of casualties purely accidental in Michigan, | 4 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 15 |
| Persons killed or injured in Michigan while intoxicated, | — |
| Trespassers and tramps killed or injured in Michigan, | 2 |
| Suicides in Michigan, | — |

STATE OF MASSACHUSETTS, }
COUNTY OF SUFFOLK, } ss.

J. L. Stackpole, Treasurer, John Hornby, Acting General Manager, of the Marquette, Houghton & Ontonagon Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, J. L. STACKPOLE, *Treasurer.*
J. HORNBY, *Act. Gen. Manager.*

Subscribed and sworn to before me, this 22d day of March, A. D. 1882, by the said J. L. Stackpole, Treasurer as aforesaid, at the city of Boston, in the county of Suffolk, and State of Massachusetts, as witness my hand and official seal this 22d day of March, A. D. 1882.

[L. S.] JOSEPH B. BRAMAN,
*Commissioner of Michigan in Massachusetts, residing at Boston, Mass., Office 5 Court street, Boston, Mass.*

Subscribed and sworn to before me this Fourth day of April, A. D., 1882, by the said John Hornby, Acting General Manager, as aforesaid, at the city of Marquette, county of Marquette, and State of Michigan, as witness my hand and official seal this 4th day of April, 1882.

[L. S.] C. W. CALL,
*Notary Public.*

# ANNUAL REPORT

OF THE

# MICHIGAN AIR LINE RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JOSEPH HICKSON, Detroit.
*Vice President,* A. B. MAYNARD, Detroit.
*Secretary and Treasurer,* S. H. WALLIS, Detroit.
*General Superintendent,* W. J. SPICER, Montreal, Canada.
*Assistant General Superintendent,* R. LARMOUR, Stratford, Canada.
*Attorney,* E. W. MEDDAUGH, Detroit.

## DIRECTORS.

JOSEPH HICKSON, Montreal.
A. B. MAYNARD, Romeo, Mich.
M. A. MCNAUGHTON, Jackson, Mich.
JAMES MCMILLAN, Detroit, Mich.
E. W. MEDDAUGH, Detroit, Mich.

Term expires September, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 7 |
| Number of stockholders in Michigan at same date, | 4 |
| Amount of full-paid stock held in Michigan at same date, | $2,000 00 |

Date of annual meeting of stockholders,—Last Wednesday of September.
Fiscal year of company ends December 31st.
General offices of the company are located at Detroit, Mich.

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## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $37,489 56 |
| Total expense, including taxes, | $34,484.36 | |
| Net income, | | $3,005 20 |

| | | |
|---|---|---|
| Interest on funded debt, | $934 40 | |
| Interest on unfunded debt, | 9,070 11 | |
| Balance for the year,—deficit, | $6,999 31 | |
| Balance (profit and loss) last year, | | $12,457 62 |
| Items not included in above, as follows: | | |
| Contribution from G. T. R, towards interest liabilities, | | 6,882 11 |
| Balance forward to next year, | 12,340 42 | |
| | $19,339 93 | $19,339 73 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $300,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $300,000.00, No. of shares, | 3,000 | | |
| Amount paid in on common, | | $300,000 00 | |
| Total amount paid in as per books of the company, | | | 300,000 00 |
| Amount realized in cash, | | 300,000 00 | |
| Amount paid in per mile of road owned by company [35 miles], | | 8,282 85 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due January 1st, 1889, interest 6 per cent, payable half-yearly), £3,200, stg., | $15,573 33 |
| Total amount of funded debt, | $15,573 33 |
| Amount received from the same in cash, $15,573 33 | |

### FLOATING DEBT.

| | | |
|---|---|---|
| Current credit balances, etc., | | 157,410 13 |
| Total debt liabilities, | | $172,983 46 |
| Amount of debt liabilities per mile of road [35 miles], | $4,942 35 | |
| Amount of liabilities, after deducting all assets not representing permanent investments,—credit, | | $487 49 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $449,843 42 |
| Average cost of construction per mile of road (not including sidings), [35 miles], | 12,852 67 |
| Proportion of cost of construction for Michigan, | 449,843 42 |

### *Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $23,000 00 |
| Passenger, mail, and baggage cars, | 5,000 00 |
| Freight and other cars, | 13,000 00 |
| Total for equipment, | $41,000 00 |
| Average cost of equipment per mile of road operated by company [35 miles], | 1,171 43 |
| Proportion of cost of equipment for Michigan, | 41,000 00 |

### *Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $490,843 42 |
| Average cost of same per mile, | 14,024 10 |
| Proportion of cost of road and equipment for Michigan, | 490,843 42 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension or alteration of road: | |
| Widening cuts, ballasting etc., | $9,009 45 |
| Total charges to property account during the year, | $9,009 45 |
| Net addition to property account for the year, | 9,009 45 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $14,150 12 | |
| From through passengers, | 1,216 11 | |
| From express and baggage, | 1,033 62 | |
| From mails, | 1,009 89 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $17,409 74 |
| Earnings per train mile run [44,294 miles], | $0.39.30 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $16,358 87 | |
| From through traffic, | 3,720 95 | |
| From other sources, freight department, | Nothing. | |
| Total earnings, freight department, | | $20,079 82 |
| Earnings per train mile run [13,062 miles], | $1 53 | |
| Total transportation earnings, | | $37,489 56 |
| Earnings per mile of road operated [35 miles], | $1,071.13 | |
| Earnings per train mile run, from all trains earning revenue [57,356 miles], | $0 65.36 | |
| Proportion of earnings for Michigan, | $37,489 56 | |
| Total income from all sources, | | $37,489 56 |
| Proportion of income for Michigan, | 37,489 56 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $6,948 44 |
| Renewal of ties, | 2,529 42 |
| Repairs of bridges, including culverts and cattle guards, | 2,601 07 |
| Repairs of fences, road crossings, and signs, | 45 62 |
| Repairs of buildings, | 350 67 |
| Total, | $12,475 22 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $2,715 09 |
| Repairs of passenger cars, | 1,360 80 |
| Repairs of freight cars, | 488 68 |
| Total, | $4,564 57 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $4,732 43 |
| Water-supply, | 357 92 |
| Oil and waste, | 293 39 |
| Locomotive service, | 3,673 62 |
| Passenger train service, | 630 90 |
| Passenger train supplies, | 81 94 |
| Freight train service, | 1,446 27 |
| Freight train supplies, | 153 90 |

| | |
|---|---|
| Telegraph expenses (maintenance and operating), | $985 68 |
| Damages to property and cattle, | 15 00 |
| Agents and station service, | 3,142 74 |
| Station supplies, | 1,180 99 |
| Total, | $16,694 78 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Taxes in Michigan, | $749 79 | |
| Total, | | $749 79 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $12,475 22 |
| Maintenance of motive power and cars, | | 4,564 57 |
| Conducting transportation, | | 16,694 78 |
| General expenses, including taxes, | | 749 79 |
| Total operating expenses and taxes, | | $34,484 36 |
| Operating expenses and taxes per mile of road [35 miles], | $985 27 | |
| Operating expenses and taxes per train mile run, for trains earning revenue, [57,356 miles], | $0 60.12 | |
| Proportion of operating expenses and taxes for Michigan, | $34,484 36 | |
| Per centage of expenses to earnings, | 91.98 | |
| Net earnings per mile of road, | $85 83 | |
| Net earnings per train mile, | $0 05.24 | |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $449,843 42 |
| Equipment account, | 41,000 00 |
| Cash items: | |
| Cash, | 47 94 |
| Other assets: | |
| Debit balances, | 460 55 |
| Total assets, | $491,352 91 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $300,000 00 |
| Funded debt, | 15,573 33 |
| Amounts contributed by municipalities for erection of stations, | 6,029 03 |

| | | |
|---|---|---|
| Unfunded debt: | | |
| Notes payable, | $157,388 13 | |
| Vouchers and accounts, | 22 00 | |
| | | $157,410 13 |
| Profit and loss, or income accounts, | | 40 42 |
| Total liabilities, | | $491,352 91 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Ridgeway to Romeo, December, 1869.
From Romeo to Rochester, March, 1879.
From Rochester to Pontiac, October, 1880.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 35 00 | |
| Total length completed, | | 35 00 |
| Total length of road belonging to this company, | | 35 00 |
| Total length of road belonging to this company in Michigan, | 35 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 2 90 |
| Same in Michigan, | 2 90 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 37 90 |
| Same in Michigan, | 37 90 | |
| Gauge of track, 4 feet, 8½ inches, | | |
| Total length of tracks laid with iron rails, weight per yard, 60 lbs., | | 37 90 |
| Total miles of road operated by this company, | | 35 00 |
| Total miles of road operated by this company in Michigan, | 35 00 | |

*Number of Bridges and Trestles in Michigan,*

| | | |
|---|---|---|
| Wooden bridges, number of, | 18; aggregate length, feet, | 1,215 |
| Total, | 18 | 1,215 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 52 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 73 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Detroit & Bay City R. R., near Rochester.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 39 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | Nil. |
| Number of crossings of highways at grade in this State without signs, | Nil. |
| Number of crossings of highways over railroad, | Nil. |
| Number of crossings of highways under railroad, | Nil. |
| Number of highway bridges 18 feet above track, | Nil. |
| Number of highway bridges less than 18 feet above track, | Nil. |

Have safety-guards been erected at over-head obstructions?
There are no overhead obstructions.

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 6 |
| Same in Michigan, | 6 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 43 |
| Same in Michigan, | 43 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 60 00 |
| What is the average cost per rod? | $1 00 | |
| The total cost of same? | $19,200 00 | |
| How many miles of new fencing have you built during the year? | | 2 |

Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road:
Eight miles for entire line, now being constructed.

| | |
|---|---|
| Total miles, | 8 00 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 7 |
| Average length of sections,—miles, | 5 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year,—on 18 miles, balance of track being newly laid, | 7,905 |
| Number of new ties put in track in Michigan, | 7,905 |
| Average number of new ties per mile of road (18 miles old road), | 439 |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges and culverts during the year (feet B. M.), | 53,820 |
| New bridges built during the year,—number: | 2 |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Clinton River (approaches) | Pile | White Oak | Autumn | 316 |
| 16½ miles, No. 7 | Pile | White Oak | Autumn | 34 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 1 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of passenger cars—8-wheel, | 1 |
| Number of express and baggage cars, | 1 |
| Number of box freight cars, | 18 |
| Number of platform cars, | 4 |
| Number of locomotives equipped with train-brake: | All on passenger trains. |
| Number of cars used in passenger trains equipped with train-brake, | 2 |
| What kind of train-brake is in use on your road? | Vacuum. |
| Number of passenger train cars with Miller platform and buffer, | 2 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 44,294 |
| Miles run by freight trains during the year, | 13,062 |
| Total mileage of trains earning revenue, | 57,356 |
| Miles run by work trains during the year, | 5,423 |
| Total train mileage, | 62,779 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 2.1 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 90 |
| Average number of cars in freight trains, | 7.4 |
| Average weight of freight rains, exclusive of freight,—tons, | 116 |

*Passenger Traffic.*

| | | | |
|---|---|---|---|
| Number of through passengers carried, | 1,175 | | |
| Number of local passengers carried, | 36,713 | | |
| Total number of passengers carried, | 37,888 | | |
| Total passenger mileage, or passengers carried one mile, | | 511,019 | |
| Average distance traveled by each passenger, | | 13.49 | |
| Average amount received from each passenger, | | | $0.40.55 |
| Highest rate of fare per mile, for any distance, | | | 0.03.50 |
| Lowest rate of fare per mile, for any distance, | | | 0.01 |
| Average rate of fare per mile, for through passengers, | | | 0.02.88 |
| Average rate of fare per mile, for local passengers, | | | 0.03.02 |
| Average rate of fare per mile, for all passengers, | | | 0.03.01 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | 4,580 | | |
| Number of tons of local freight carried, | 17,833 | | |
| Total tons of freight carried, | 22,413 | | |
| Total mileage of through freight, | | 164,885 | |
| Total mileage of local freight, | | 230,143 | |
| Total freight mileage, or tons carried one mile, | | 395,028 | |
| Average ton haul for through freight, | | 36.00 | |
| Average ton haul for local freight, | | 12.91 | |
| Average ton haul for all freight, | | 17.62 | |
| Average amount received for each ton haul, | | | $89.60 |
| Average rate per ton per mile, received for through freight, | | | 0.02.26 |
| Average rate per ton per mile, received for local freight, | | | 0.07.11 |
| Average rate per ton per mile, received for all freight, | | | 0.05.08 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 3,590 | 16.00 |
| Flour, | 2,958 | 13.18 |
| Provisions (beef, pork, lard, etc.), | 135 | .60 |
| Animals, | 1,323 | 5.89 |
| Other agricultural products, | 1,659 | 7.50 |
| Lumber and forest products, | 5,708 | 25.45 |
| Coal, | 1,099 | 4.90 |
| Plaster, | 24 | .10 |
| Salt, | 508 | 2.26 |
| Petroleum, | 90 | .40 |
| Other iron and castings, | 170 | .75 |

| | Tons. | Per Ct. |
|---|---|---|
| Ores, | 35 | 15 |
| Stone and brick, | 91 | .40 |
| Manufactures,—articles shipped from point of production, | 1,183 | 5.27 |
| Merchandise and other articles not enumerated above, | 3,840 | 17.15 |
| Total tons carried, | 22,413 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The railway company does the express business itself.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

None.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

None.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

None.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

None.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

The present rate is $1,135 per annum.

### *Telegraph.*

Number of miles of telegraph owned by company, - - None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Western Union Telegraph Company, 35 miles.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### INJURED.

April 16. M. Hucking, brakeman, Romeo, coupling cars.
April 24. W. Buchanan, brakeman, Romeo, fell from top of car.

### TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | 2 | |
| Derailments | | | | | | |
| Falling from trains | | | | | | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | | | | | 2 | |

### SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | None. |
| Number of persons injured during the year on the entire line, | 2 |
| Same for Michigan, | 2 |
| Number of casualties purely accidental in Michigan, | — |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 2 |

U. S. CONSULATE AT MONTREAL, DOMINION OF CANADA. } ss.

W. J. Spicer, Superintendent of the Michigan Air Line Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), W. J. SPICER,
*Superintendent.*

Subscribed and sworn to before me, this 26th day of April, A. D. 1882.
[L. S.] J. Q. SMITH,
*U. S. Consul General, at Montreal.*

# ANNUAL REPORT

OF THE

# MICHIGAN CENTRAL RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* WM. H. VANDERBILT, New York.
*Vice President,* CORNELIUS VANDERBILT, New York.
*Secretary,* E. D. WORCESTER, New York.
*Treasurer,* CORNELIUS VANDERBILT, New York.
*General Manager,* HENRY B. LEDYARD, Detroit, Mich.
*Assistant General Superintendent,* E. C. BROWN, Jackson, Mich.
*Division Superintendents,* D. S. SUTHERLAND, Detroit, Mich.; A. H. L'HOMMEDIEU, Chicago, Ill.; C. B. BUSH, Jackson, Mich.; W. A. VAUGHAN, Bay City, Mich.
*Superintendent of Telegraph,* C. C. REED, Jackson, Mich.
*Auditor,* D. A. WATERMAN, Detroit, Mich.
*General Passenger Agent,* O. W. RUGGLES, Chicago, Ill.
*General Freight Agent,* J. A. GRIER, Chicago, Ill.
*Solicitor,* G. V. N. LOTHROP, Detroit. Mich.

## DIRECTORS.

WILLIAM H. VANDERBILT, New York.
AUGUSTUS SCHELL, New York.
SAMUEL F. BARGER, New York.
CORNELIUS VANDERBILT, New York.
WILLIAM K. VANDERBILT, New York.
EDWIN D. WORCESTER, New York.
ASHLEY POND, Detroit, Mich.
ANSON STAGER, Chicago, Ill.
WILLIAM L. SCOTT, Erie, Pa.

Term expires May 4th, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election, . . . 2,037
Number of stockholders in Michigan at same date, . . 13
Amount of full-paid stock held in Michigan at same date, . $279,900
Date of annual meeting of stockholders,—Thursday following first Wednesday in May.
Fiscal year of company ends December 31st.
General offices of the company are located at—New York, Grand Central depot; Detroit, Mich., foot of Third St.; Chicago, Ill., foot of South Water St.

## GENERAL EXHIBIT.

### ENTIRE SYSTEM.

| | Debit. | Credit. |
|---|---|---|
| Total income, . . . . . | | $8,934,331 62 |
| Total expense, including taxes, . . . | $6,732,095 90 | |
| Net income, . . . . . | | $2,202,235 72 |
| Interest on funded debt, . . . . | *1,508,616 38 | |
| Rentals, . . . . . | 184,310 00 | |
| | | 1,692,926 38 |
| Balance applicable to dividends, . . . . . | | 509,309 34 |
| Dividends declared (2½ per cent), . . | $468,455 10 | |
| Balance for the year, . . . . . | | $40,854 24 |
| Balance (profit and loss) last year, . . . . . | | 3,325,312 74 |
| Items not included in above as follows: | | |
| Detroit & Bay City R. R. Co., interest and notes charged off—uncollectible, . . | 224,473 62 | |
| Sundry items charged to income account, . | 10,276 00 | |
| Balance forward to next year, . . . | 3,131,417 36 | |
| | $3,366,166 98 | $3,366,166 98 |

## ANALYSIS OF CAPITAL STOCK.

### MICHIGAN CENTRAL R. R. CO.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, . | | Not limited. |
| Par value of shares, . . . | $100 00 | |
| Average price received per share, . | $100 00 | |
| Amount issued, $18,738,204.00; | | |
| No. of shares, . . . | 187,384 $\frac{4}{10}$ | |
| Amount paid in on common, . . . | $18,738,204 00 | |
| Total amount paid in as per books of the Company, . | | $18,738,204 00 |

* Of this amount, $745,196.38 is for interest on funded debt leased lines.

| | | |
|---|---|---|
| Amount paid in per mile of road owned by company, | $69,382 77 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT—MAIN LINE.

| | |
|---|---|
| Mortgage Loan Bonds (due 1882, interest eight per cent, payable April and October), | $556,000 00 |
| First Sinking Fund Mortgage Bonds (due 1882, interest eight per cent, payable April and October, | 1,508,000 00 |
| Second Sinking Fund Mortgage Bonds (due 1882, interest eight per cent, payable April and October), | 671,000 00 |
| Equipment Mortgage Bonds (Due 1883, interest at eight per cent, payable April and October), | 556,000 00 |
| Consolidated Mortgage Bonds (due 1902, interest* seven per cent, amount due May and November), | 8,000,000 00 |
| Total amount of funded debt, | $11,291,000 00 |

### FLOATING DEBT.

| | |
|---|---|
| Current credit balances, etc., | $980,756 62 |
| Total debt liabilities, | $12,271,756 62 |
| Amount of debt liabilities per mile of road [270.07 miles], | $45,439 17 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | 8,142,376 25 |

Contingent liabilities as follows:

*Bonds Guaranteed.*

| | |
|---|---|
| Michigan Air Line Mortgage Bonds, | $200,000 00 |
| Grand River Valley Railroad Bonds, | 1,000,000 00 |
| Jackson, Lansing & Saginaw Railroad Bonds, | 4,135,000 00 |
| Kalamazoo & South Haven Railroad Bonds, | 710,000 00 |
| Joliet & Northern Indiana Railroad Bonds, | 800,000 00 |
| Detroit & Bay City Railroad Bonds, | 424,000 00 |
| Total, | $7,269,000 00 |

* Of these bonds the Sinking Fund Trustees have purchased and now hold—

| | |
|---|---|
| Mortgage Loan Bonds | $119,000 00 |
| First Sinking Fund Bonds | 470,500 00 |
| Second Sinking Fund Bonds | 158,000 00 |
| | $747,500 00 |

Interest on these bonds is not paid.

## COST OF ROAD AND EQUIPMENT.

### MAIN LINE.

| | |
|---|---|
| Total cost of road and equipment, | $29,480,815 77 |
| Average cost of same per mile, | 109,159 91 |
| Proportion of cost of road and equipment for Michigan, | 24,124,340 11 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

### ENTIRE SYSTEM.

| | |
|---|---|
| Branches, extension or alteration of road, specifying each: | |
| New track at Detroit Junction (about 14 miles), | $90,228 07 |
| New track, cost of gravel pits, | 4,500 00 |
| Double track extension, | 75,853 36 |
| Land, | 49,811 00 |
| Passenger and freight stations, wood-sheds, and water stations, Engine-houses, car-sheds, and turn-tables, | 17,897 44 |
| Total charges to property account during the year, | $238,289 87 |
| Any other expenditures charged to property account (specifying the same): None. | |
| *Net addition to property account for the year, | $238,289 87 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER—ENTIRE SYSTEM.

| | | |
|---|---|---|
| From local passengers, | $1,740,333 94 | |
| From through passengers, | 1,072,371 59 | |
| From express and baggage, | 126,070 74 | |
| From mails, | 119,203 29 | |
| From other sources, passenger department, | 4,800 00 | |
| Total earnings, passenger department, | | $3,062,779 56 |
| Earnings per train mile run [1,964,673 miles], | $1 56 | |

### EARNINGS, FREIGHT—ENTIRE SYSTEM.

| | | |
|---|---|---|
| From local traffic, | $3,073,796 96 | |
| From through traffic, | 2,601,934 04 | |
| From other sources, freight department, | Nothing. | |
| Total earnings, freight department, | | 5,675,731 00 |
| Earnings per train mile run [4,138,875 miles], | $1 37 | |
| Total transportation earnings, | | $8,738,510 56 |

| | |
|---|---|
| *Main Line | $225,838 28 |
| Jackson, Lansing & Saginaw | 7,801 59 |
| Grand River Valley | 4,650 00 |
| Total | $238,289 87 |

| | | |
|---|---|---|
| Earnings per mile of road operated [949.59 miles], | $9,202 40 | |
| Earnings per train mile run, from all trains earning revenue [6,103,548 miles], | $1 43 | |
| Proportion of earnings for Michigan, | 7,692,286 16 | |
| Rents for use of road, stations, etc., | | $30,765 57 |
| Income from all other sources: | | |
| Interest and dividends from sundry securities, | | 165,055 49 |
| Total income from all sources, | | $8,934,331 62 |
| Proportion of income for Michigan, | 7,864,665 46 | |

EXPENSES—ENTIRE SYSTEM.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, estimated (includes track rental, $111,295.71), | $679,863 40 |
| Renewal of rails, estimated, | 594,596 82 |
| Renewal of ties, estimated, | 135,687 50 |
| Repairs of bridges, including culverts and cattle guards, | 118,433 15 |
| Repairs of fences, road-crossings, and signs, | 70,397 46 |
| Repairs of buildings (includes rental, $29,626.90), | 128,853 06 |
| Total, | $1,727,331 39 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $360,278 08 |
| Repairs of passenger cars, | 129,434 24 |
| Repairs of freight cars, | 335,483 77 |
| Total, | $825,196 09 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives (includes fuel for machine car shops, etc., $15,222 87), | $820,765 30 |
| Water-supply, | 61,417 14 |
| Oil and waste, | 92,984 50 |
| Locomotive service, | 576,869 81 |
| Passenger train service, | 158,844 20 |
| Passenger train supplies, | 25,707 00 |
| Mileage of passenger cars (debit balance), | 3,363 04 |
| Freight train service, | 382,627 31 |
| Freight train supplies, | 46,150 03 |
| Mileage of freight cars (debit balance), | 232,616 08 |
| Telegraph expenses (maintenance and operating), | 106,175 72 |
| Damage and loss of freight and baggage, | 23,018 77 |
| Damages to property and cattle, | 13,978 66 |
| Personal injuries, | 100,339 81 |

| | | |
|---|---|---|
| Agents and station service, | | $757,571 05 |
| Station supplies, | | 48,900 15 |
| Total, | | $3,451,328 57 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $40,500 00 |
| Salaries of clerks in general offices, | | 141,249 94 |
| Law expenses, | | 21,357 40 |
| Insurance, | | 6,918 16 |
| Stationery and printing, | | 36,597 62 |
| Outside agencies and advertising, | | 209,371 45 |
| Contingencies, | | 55,942 59 |
| Taxes in Michigan, | $188,954 60 | |
| Taxes in other States, | 26,848 09 | |
| | | 215,802 69 |
| Total, | | $727,739 85 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $1,727,831 39 |
| Maintenance of motive power and cars, | | 825,196 09 |
| Conducting transportation, | | 3,451,328 57 |
| General expenses, including taxes, | | 727,739 85 |
| Total operating expenses and taxes, | | $6,732,095 90 |
| Operating expenses and taxes per mile of road, | $7,089 48 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [61,035.48 miles], | $1 10 | |
| Proportion of operating expenses and taxes for Michigan, | $5,926,096 33 | |
| Per centage of expenses to transportation earnings, | 77.04 | |
| Net earnings per mile of road, | $2,112 92 | |
| Net earnings per train mile, | $0 33 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| *Construction account, including amount expended account, | | $38,175,584 58 |
| Equipment account, construction, etc., of leased lines, | | - |
| Other investments (specifying same): | | |
| Railroad stocks, bonds, etc.. | | 482,699 99 |

* This includes amounts charged to construction account of leased lines as follows;

| | |
|---|---|
| Jackson, Lansing & Saginaw R. R. | $7,801 89 |
| Grand River Valley R. R. | 4,650 00 |
| Detroit & Bay City cost to M. C. R. R. Co. | 3,541,038 59 |
| | $3,553,490 48 |

| | | |
|---|---|---|
| Cash items: | | |
| Cash, | $489,519 97 | |
| Bills receivable, | None. | |
| Due from agents and companies, | 296,672 25 | |
| | | $786,192 22 |
| Other assets: | | |
| Materials and supplies, | 282,457 37 | |
| Debit balances, | 390,443 82 | |
| | | 672,901 19 |
| Total assets, | | $40,117,377 98 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $18,738,204 00 |
| Funded debt: | | |
| Mortgage Loan Bonds, | $556,000 00 | |
| First Sinking Fund Bonds, | 1,508,000 00 | |
| Second Sinking Fund Bonds, | 671,000 00 | |
| Equipment Bonds, | 556,000 00 | |
| Michigan Air Line Railroad Bonds, | 1,900,000 00 | |
| Consolidated Mortgage Bonds, | 8,000,000 00 | |
| Grand River Valley Railroad Bonds, | 500,000 00 | |
| Detroit & Bay City Railroad Bonds, | 3,576,000 00 | |
| | | 17,267,000 00 |
| See note under "Analysis of Debt Accounts." | | |
| Unfunded debt: | | |
| Interest unpaid, | $27,550 00 | |
| Dividends unpaid, | 2,018 16 | |
| Vouchers and accounts, | 769,245 36 | |
| | | 798,813 52 |
| Proceeds of J. L. & S. R. R. Extension Bonds, | | 181,943 10 |
| Profit and loss, or income accounts, | | 3,131,417 36 |
| Total liabilities, | | $40,117,377 98 |

LIABILITIES NOT INCLUDED IN BALANCE SHEET.

| | |
|---|---|
| Bonds guaranteed by this company, | $6,354,000 00 |
| Overdue interest on same, | None. |
| Other liabilities, | None. |
| Total, | $6,354,000 00 |

## DESCRIPTION OF ROAD.

### MAIN LINE.

Date when the road or portions thereof were opened for public use:

The building of this road was begun by the Detroit & St. Joseph Railroad Company in 1836; but before completing any portion of the same that com-

pany sold its property and franchises to the State, April 22, 1837. Under State management it was completed—

From Detroit to Ypsilanti, February 5, 1838.
From Detroit to Ann Arbor, October 17, 1839.
From Detroit to Dexter, June 30, 1841.
From Detroit to Jackson, December 29, 1841.
From Detroit to Albion, June 25, 1844.
From Detroit to Marshall, August 12, 1844.
From Detroit to Battle Creek, November 25, 1845.
From Detroit to Kalamazoo, February 2, 1846.

In the summer of 1846 the State sold the road to the Michigan Central Railroad Company, and gave possession thereof on September 24, 1846. That company completed the road—

From Kalamazoo to Niles, autumn of 1848.
From Kalamazoo to New Buffalo, spring of 1849.
From Kalamazoo to Michigan City, autumn of 1850.
From Kalamazoo to Chicago, May, 1852.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 221 00 | |
| Length completed in Indiana, | 43 00 | |
| Length completed in Illinois, | 6 07 | |
| Total length completed, | | 270 07 |
| Length of double track on main line, | | 89 00 |
| Total length of road belonging to this company, | | 270 07 |
| Total length of road belonging to this company in Michigan, | 220 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 187 18 |
| Same in Michigan, | 125 76 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 546 25 |
| Same in Michigan, | 418 26 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 60 lbs., | | 359 07 |
| Total length of tracks laid with iron rails, weight per yard, 60 lbs., | | 187 18 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

Name, description, and length of each:

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Michigan Air Line Railroad, | | 114 72 |
| Grand River Valley Railroad, | | 84 00 |
| Jackson, Lansing & Saginaw Railroad, | | 231 80 |
| Kalamazoo & South Haven Railroad, | | 40 00 |
| Joliet & Northern Indiana Railroad, | | 45 00 |
| Detroit & Bay City Railroad, | | 150 00 |
| Total length of above roads, | | 665 52 |

| | | |
|---|---|---|
| Total length of above roads in Michigan, | 614 90 | |
| Total length of above roads in other States, specifying each: | | |
| Indiana, | 21 02 | |
| Illinois, | 29 60 | |
| | | 665 52 |
| Total miles controlled, | | 935 59 |
| Distance Chicago to Kensington used jointly with I. C. R. R., | | 14 00 |
| Total miles of road operated by this company,* | | 949 59 |
| Total miles of road operated by this company in Michigan, | | 835 90 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 29; aggregate length, feet, | 1,310 |
| Stone bridges, number of, | 2; aggregate length, feet, | 70 |
| Iron bridges, number of, | 17; aggregate length, feet, | 2,539 |
| Wooden trestles, | 6; aggregate length, feet, | 1,150 |
| Total, | 54 | 5,069 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 277 |
| Stone, number, | 85 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 660 |
| Number of cattle guards renewed during the year, | 80 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Lake Shore & Michigan Southern R. R., at Grand Trunk Junction, Albion, and Kalamazoo.
Detroit, Butler & St. Louis R. R., at Grand Trunk Junction,
Flint & Pere Marquette R. R., at Wayne Junction.
Grand Rapids & Indiana R. R., at Kalamazoo.
Chicago & Grand Trunk R. R., at Battle Creek.

What railroads cross your road either over or under your grade in this State and where?
Toledo, Ann Arbor & Grand Trunk R. R., at Ann Arbor.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 237 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 19 |
| Number of crossings of highways at grade in this State without signs, | None. |

* This does not include 63 8-10th miles, Gaylord to Mackinac City, "Northern Extension," constructed during year 1881, which makes the total miles operated January 1, 1882, 1,012 89-100ths miles.

| | |
|---|---|
| Number of crossings of highways over railroad, | 26 |
| Number of crossings of highways under railroad, | 6 |
| Number of highway bridges 18 feet above track, | 19 |
| Number of highway bridges less than 18 feet above track, | 7 |
| Have safety-guards been erected at over-head obstructions, | Yes. |

*Stations—Entire System.*

| | |
|---|---|
| Number of stations on whole line, | 188 |
| Same in Michigan, | 166 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials,—estimated, | 6,500 |
| Same in Michigan,—estimated, | 4,500 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 442.00 |
| What is the average cost per rod?—estimated, | $1 00 | |
| The total cost of same?—Estimated, | $141,440 00 | |
| How many miles of new fencing have you built during the year? | | 105.95 renewal. |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | None |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 60 |
| Average length of sections,—miles, | 3.7 |
| Average number of men in each section gang, | 3½ |
| Number of new ties put in whole line during the year, | 240,120 |
| Number of new ties put in track in Michigan, | 198,510 |
| Average number of new ties per mile of road, | 890 |
| New rails put in track: | |
| Iron [tons —] miles, | None. |
| New steel [tons 8,250] miles, | 87.7 |
| Total miles of track laid with new rails, | 87.7 |

Between what points are new rails laid:

As needed. Second-class steel taken out was transferred to the leased lines.

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 410,393 |
| Amount of trestle work replaced with earth during the year (linear feet), | 780 |
| Timber culverts replaced with stone—number, | 1 |

| | |
|---|---|
| Timber culverts replaced with timber,—[number, 16], timber used (feet B. M.), | 71,800 |
| New bridges built during the year,—number, | 3 |

*Michigan.*

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| 2½ miles west of Ypsilanti | Truss | Iron | August | 120 |
| 1 mile west of Ann Arbor | Truss | Iron | September | 120 |
| ½ mile west of Dexter | Truss | Iron | July | 54 |

## ROLLING STOCK.

*Entire System.*

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 208 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 45 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of passenger cars—12-wheel, | 76 |
| Number of passenger cars—8-wheel, | 54 |
| Number express and baggage cars, | 39 |
| Number of box freight cars, | 4,523 |
| Number of stock cars, | 486 |
| Number of platform cars, | 1,431 |
| Number of conductors' way cars, | 155 |
| Other cars as follows: | |
| Wrecking and pile drivers, | 6 |
| Hand cars, 275; rubble cars, 210, | 485 |
| Number of locomotives equipped with train-brake, | 67 |
| Number of cars used in passenger trains equipped with train-brake, | 163 |
| What kind of train-brake is in use on your road? Automatic and Westinghouse air-brake combined. | |
| Number of passenger train cars with Miller platform and buffer, | 163 |

## MILEAGE, TRAFFIC, ETC.

*Train Mileage—Entire System.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 1,964,673 |
| Miles run by freight trains during the year, | 4,138,875 |
| Total mileage of trains earning revenue, | 6,103,548 |
| Miles run by work trains during the year, | 89,373 |
| Miles run by switching trains,* | 2,227,073 |
| Total train mileage, | 8,419,994 |

* No allowance to passenger and freight trains for switching.

*Cars and Weight of Trains—Main Line.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 6.35 |
| Average weight of passenger trains, exclusive of passengers, including locomotives, tons, | 185 |
| Average number of cars in freight trains, | 29.13 |
| Average weight of freight trains, exclusive of freight, including locomotives, tons, | 345 |

*Passenger Traffic—Entire System.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 245,154 | | |
| Number of local passengers carried, | 1,834,135 | | |
| Total number of passengers carried, | 2,079,289 | | |
| Total passenger mileage, or passengers carried one mile, | | 135,706,148 | |
| Average distance traveled by each passenger, | | 65.27 | |
| Average amount received from each passenger, | | | 1.35.00 |
| Highest rate of fare per mile, for any distance, | | | 0.03 |
| Lowest rate of fare per mile, for any distance, | | | 0.00.53 |
| Average rate of fare per mile, for through passengers, | | | 0.01.54 |
| Average rate of fare per mile, for local passengers, | | | 0.02.63 |
| Average rate of fare per mile, for all passengers, | | | 02.07 |

*Freight Traffic—Entire System.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 2,066,177 | |
| Number of tons of local freight carried, | 2,130,719 | |
| Total tons of freight carried, | 4,196,896 | |
| Total mileage of through freight, | | 564,700,430 |
| Total mileage of local freight, | | 225,322,500 |
| Total freight mileage, or tons carried one mile, | | 790,022,930 |
| Average ton haul for through freight, | | 273 |
| Average ton haul for local freight, | | 106 |
| Average ton haul for all freight, | | 188 |
| Average amount received for each ton haul, | | 1.35 |
| Average rate per ton per mile, received for through freight, | | 00.46 |
| Average rate per ton per mile, received for local freight, | | 01.36 |
| Average rate per ton per mile, received for all freight, | | 00.71 |

*Tonnage of Articles Transported—Entire System.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 797,363 | 19.00 |
| Flour, | 209,464 | 4.99 |
| Provisions (beef, pork, lard, etc.), | 195,154 | 4.65 |
| Animals, | 263,276 | 6.27 |
| Other agricultural products, | 116,220 | 2.77 |
| Lumber and forest products, | 707,792 | 16.86 |
| Coal, | 312,788 | 7.45 |
| Plaster, | 19,792 | .47 |
| Salt, | 163,182 | 3.89 |
| Petroleum, | 6,514 | .16 |
| Railroad iron,—iron and steel rails, | 39,234 | .94 |
| Pig and bloom iron, | 65,561 | 1.56 |
| Other iron and castings, | 22,643 | .54 |
| Stone and brick, | 106,258 | 2.53 |
| Manufactures,—articles shipped from point of production, | 135,161 | 3.22 |
| Merchandise and other articles not enumerated above, | 1,036,494 | 24.70 |
| Total tons carried, | 4,196,896 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company.

Rate—50c. per 100 pounds on through freight; 6c. per 100 pounds on local freight, with guarantee of $300.00 per day.

Freight delivered and received at depots of M. C. R. R. Co.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Erie & North Shore Despatch, Consolidated, Detroit, Mich.

Blue Line, Rochester N. Y.

Canada Southern Line, Buffalo, N. Y.

Merchants' Despatch Transportation Co., New York city.

Hoosac Tunnel Line, Rochester, N. Y.

All the above lines except "Merchants' Despatch," are operated by railroad companies, who own the rolling stock, and jointly share the results of operation.

The "Merchants' Despatch" is a corporate company running their own cars, on which they receive mileage and commissions on business secured.

No preference given.

*Entire System.*

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads,* for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Atlas Refining Co., Buffalo, N. Y., | $3 37 |
| Anderson Refrigerator Car Co., New York, N. Y., | 60 41 |
| Bonsfield & Co., Bay City, Mich., | 19 01 |
| Chicago & Wilmington Coal Co., Chicago, Ill., | 18 74 |
| Commercial Express, Chicago, Ill., | 1,650 33 |
| Continental Oil and Transportation Co., Cleveland, O., | 29 57 |
| Detroit Car Loan Company, Bridgeport Conn., | 9,424 78 |
| Detroit Iron Furnace Co., Detroit, Mich., | 63 21 |
| Erie & Chicago Car Co., Detroit, Mich., | 37,406 94 |
| Erie & Pacific Despatch, Indianapolis, Ind., | 661 45 |
| Eureka Coal Co., Chicago, Ill., | 14 86 |
| E. B. Rice, & Co., Chicago, Ill., | 5 01 |
| Empire Line, Philadelphia, Pa., | 317 13 |
| Fish Bros., Racine, Wis., | 23 41 |
| Great Western Despatch, New York city, | 61 63 |
| Merchants' Despatch, New York city, | 25,536 11 |
| Mason Machine Works, Taunton, Mass., | 8 43 |
| National Car Company Line, St. Albans, Vt., | 68,108 53 |
| National Line, Pittsburg, Pa., | 25 92 |
| Pullman Palace Car Co., Chicago, Ill., | 2,540 34 |
| Standard Oil Company, Cleveland, O., | 6 60 |
| Streater Coal Co., Streator, Ill., | 27 80 |
| St. Louis Refrigerator Car Co., St. Louis, Mo., | 13 24 |
| Tiffany Refrigerator Car Co., Chicago, Ill., | 55 54 |
| Union Iron Co., Detroit, Mich. | 31 99 |
| Union Line, Philadelphia, Pa., | 113 32 |
| White Line, Buffalo, N. Y., | 32 08 |
| Zimmerman Refrigerator Car Co., Chicago, Ill., | 6 08 |
| Total, | $146,265 83 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Three dining-room cars owned by the company. Price per meal to passengers, 75c.

Wagner sleeping and drawing room cars.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Pullman's Palace Car Company, $2,294.81.

*United States Mail.*

**What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?**

| DIVISION. | FROM. | TO. | Per Mile Per Annum. |
|---|---|---|---|
| Postal Car Service | | | $40 00 |
| Main Line | Detroit | Jackson | 292 60 |
| | Jackson | Chicago, Ill. | 192 60 |
| Air Line | Jackson | Niles | 59 85 |
| | Niles | South Bend, Ind. | 42 75 |
| Grand River Valley | Jackson | Grand Rapids | 96 20 |
| Saginaw | Jackson | Gaylord's | 64 98 |
| | Jackson | Bay City | 10 60 |
| South Haven | Account 2d daily line of | route agent's apartments | |
| Joliet | Kalamazoo | South Haven | 42 75 |
| Bay City | Joliet | Lake | 42 75 |
| | Detroit | Bay City | 96 32 |
| | East Saginaw | Caro | 42 75 |

*Telegraph.*

Number of miles of telegraph owned by company, . . . .

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Owned by M. C. R. R. Co.—Main Line:

| | | |
|---|---|---|
| 4 wires, 223 miles each, . . . . . | 892 | |
| 1 wire, 3 miles, . . . . . | 3 | |
| Total miles wire owned by M. C. R. R. Co., . . . . | | 895 |
| Owned by W. U. Tel. Co.: | | |
| Main Line, poles, 1 line, miles, . . . . . | 223 | |
| South Bend Division, poles, 1 line, miles, . . . | 6 | |
| Total miles poles owned by W. U. Tel. Co., . . . . | | 229 |
| Main Line, 5 wires, 223 miles each, . . . | 1,115 | |
| Main Line, 2 wires, 109 miles each, . . . | 218 | |
| Main Line, 2 wires, 76 miles each, . . . | 152 | |
| Main Line, 2 wires, 88 miles each, . . . | 176 | |
| J., L. & S. Division, 2 wires, 37 miles each, . . . | 74 | |
| J., L. & S. Division, 1 wire 41 miles, . . . . | 41 | |
| South Bend Division, 1 wire 6 miles, . . . . | 6 | |
| Air Line Division, 2 wires, 104 miles each, . . | 208 | |
| Total miles wire owned by W. U. Tel. Co.: . . . . | | 1,990 |
| Owned jointly by M. C. R. R. & W. U. Tel. Co.: | | |
| J., L. & S. Division, total miles poles, . . . . | 296 | 296 |
| J., L. & S. Division, total miles wire, . . . . | 296 | 296 |

| | | |
|---|---|---|
| Owned by Mich. Tel. Co.: | | |
| Air Line Division, miles poles, . . . . . | 104 | |
| Grand Rapids Division, miles poles, . . . . | 84 | |
| South Haven Division, miles poles, . . . . | 40 | |
| Total miles poles owned by Mich. Tel. Co., . . . . | | 288 |
| Air Line Division, 2 wires, 104 miles each, . . . | 208 | |
| Grand Rapids Division, 2 wires, 84 miles each, . . | 168 | |
| South Haven Division, 1 wire, 40 miles, . . . | 40 | |
| Total miles wire owned by Mich. Tel. Co., . . . . | | 416 |

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

### KILLED—ENTIRE SYSTEM.

January 8. E. Whitman, passenger, Kalamazoo, fell from train; carelessness.

January 20. W. Allerdice, brakeman, Ypsilanti, struck by engine; want of caution.

February 2. Jno. Joss, passenger, Barron Lake, derailment.

March 23. Luke Lanney, citizen, Roscommon, asleep on track; drunk.

April 19. Alex. Campbell, passenger, Battle Creek, fell from moving train; carelessness.

April 23. A. Tate, Citizen, Oakley, attempted to jump on moving train; drunk.

April 25. H. Whiteman, agent, Inksters, struck by engine; carelessness.

May 4. J. Millman, brakeman, Eaton Rapids, thrown from moving train; accidental.

June 27. O. Bird, occupation unknown, Ann Arbor, struck by engine; trespasser; drunk.

June 11. F. Lee, boy, East Saginaw, attempted to get on moving train; carelessness.

June 22. D. Breese, citizen, Marshall, struck by engine, trespasser; drunk.

July 4. A. Quackenbush, citizen, Paines, asleep on track; drunk.

July 9. Unknown man, blind, Detroit, struck by engine, trespasser; carelessness.

July 17. James Madden, citizen, Niles, struck by engine, trespasser; carelessness.

July 19. E. Winfield, citizen, Jackson, struck by engine, insane, trespasser; carelessness.

July 22. Wm. Lynch, citizen, Kalamazoo, found dead on track, struck by unknown train, trespasser; carelessness.

July 26. James Hanner, employé railroad train, Bay City, fell between cars; want of caution.

August 5. Mrs. G. La Born, citizen, Corymbo, struck by engine crossing track, trespasser; carelessness.

August 7. C. Murray, citizen, Ann Arbor, attempted to jump on moving train, trespasser; carelessness.

August 16. Unknown man, Lawton, jumped from moving train; drunk or crazy.

August 21. O. Halsted, sectionman, Kalamazoo, struck by engine; drunk.

August 24. H. Orthlering, Francisco, struck by unknown train, trespasser; carelessness.

August 26. C. A. Thurman, citizen, Michigan Center, struck by engine, trespasser; carelessness.

October 17. J. Geary, citizen, Orion, struck by engine, road crossing; carelessness.

October 21. F. W. Worden, supposed citizen, Detroit, struck by engine, trespasser, carelessness.

November 8. T. Keenan, sectionman, Zilwaukee, asleep on track; drunk.

December 5. J. Meachmam, citizen, Battle Creek, struck by engine at crossing; want of caution.

December 7. John Gillespie, in charge of three horses on freight, Colon, rear end collision; accidental.

December 13. M. Boyle, citizen, Dayton, struck by engine, trespasser; carelessness.

15. D. St. Clair, citizen, Welch, struck by engine, trespasser; carelessness.

December 22. —— Frye, citizen, Charlotte, struck by engine, trespasser; carelessness.

December 23. C. Kendig, brakeman, Buchanan, coupling; carelessness.

INJURED—ENTIRE SYSTEM.

January 7. F. McAllister, switchman, Jackson Junction, coupling, hand crushed; lack of caution.

January 10. J. I. Johnson, division roadmaster, Ypsilanti, fell from train, leg crushed; lack of caution.

January 25. J. Maloney, engineer, Detroit, scalded; carelessness.

January 28. C. W. Todd, brakeman, Glenwood, getting on moving train, foot crushed; carelessness.

January 28. W. Conat, switchman, Detroit, attempted to get on moving train, broke his leg; carelessness.

February 2. R. C. Brown, passenger, Barron Lake, arm injured; derailment.

February 2. Wm. Fuller, passenger, Barron Lake, slightly bruised; derailment.

February 2. H. McKromer, passenger, Barron Lake, shoulder bruised; derailment.

February 2. Sally McPherson, passenger, Barron Lake, scalp wound; derailment.

February 2. J. Milan, brakeman, G. T. Junction, coupling, foot crushed; carelessness.

February, 2. Mrs. W. B. Reedy, passenger, Barron Lake, leg bruised; derailment.

February 2. Miss Kate Schaffer, passenger, Barron Lake, contusion head and back; derailment.

February 2. F. Snyder, passenger. Barron Lake, scalp wound; derailment.

February 2. Miss M. C. Wilkinson, passenger, Barron Lake, face and arm bruised; derailment.

February 2. R. G. Wood, conductor, Barron Lake, arm bruised; derailment.

February 7. P. Tennison, car repairer, Jackson Junction, climbing through train, leg pinched; carelessness.

March 4. J. J. Frost, passenger, Bennington, hip bruised; derailment.

March 11. D. Larkin, citizen, North Lansing, struck by engine, lost both legs; drunk.

March 13. H. E. Dean, brakeman, New Buffalo, fell on car, back injured; accidental.

March 14. Jno. Kelly, citizen, G. T. Junction, shoulder bruised, struck by engine; carelessness.

March 19. Chas. Wierman, fireman, Laingsburg, fell from engine, shoulder bruised; purely accidental.

March 21. Ellen Morley, citizen, Jackson, struck by engine, arm broken; pure carelessness.

March 24. E. Bock, brakeman, Delhi, coupling, lost end of finger; want of caution.

March 24. C. S. Lee, brakeman, Trumbull's, fell from train, bruised; accidental.

March 26. M. Alger, tramp, Lawton, tried to get on moving train, both legs crushed; carelessness.

April 2. F. A. McCall, brakeman, Paines, coupling, arm and back bruised; carelessness.

April 4. H. H. Potter, brakeman, Three Oaks, fell from moving train; hip bruised; want of caution.

April 7. A. Baker, brakeman, Galesburg, coupling, finger pinched; want of caution.

April 10. J. Aubert, brakeman, Lawton, coupling, hand pinched; carelessness.

April 10. H. S. Vandusen, brakeman, Niles, coupling, foot caught in frog, leg crushed; want of caution.

April 10. C. Van Vliet, brakeman, Wayne Junction, fell from moving train, slightly bruised; want of caution.

April 23. Jno. Luscher, passenger, Marshall, jumped from moving train, hand crushed; carelessness.

April 25. Wm. Holland, switchman, Detroit, attempted to get on moving train, foot crushed; carelessness.

April 25. A. Phillips, switchman, Detroit, coupling, leg pinched; carelessness.

May 9. H. Munroe and lady (name not known), Detroit, thrown from buggy, some bruised; want of caution.

May 10. Unknown man, Roscommon, lying on track, badly injured; drunk.

May 11. M. Lockhart, farmer, Jackson, trespasser, struck by engine, arm bruised; carelessness.

May 13. D. Mosher, citizen, Kalamazoo, attempted to jump on moving train, foot crushed; carelessness.

May 20. A. H. Nelson, brakeman, Bath, fell from moving train; badly bruised; want of caution.

May 23. J. Harman, brakeman, Union City, coupling, back bruised; carelessness.

May 23. A. Lappam, engineer, Kawkawlin, jumped from moving train, leg broken; carelessness.

May 23. E. L. Travis, fireman, Kawkawlin, jumped from moving train, shoulder dislocated; carelessness.

June 6. O. S. Howard, citizen, Wayne Junction, trespasser, struck by engine, arm crushed; carelessness.

June 13. Judas Crittenden, brakeman, Owosso, coupling, hand crushed; carelessness.

July 2. Lizzie Klotz, passenger, Michigan Center, fell off moving passenger train, scalp wound; carelessness.

July 9. —— Loftus, citizen, Lansing, jumped off moving train, leg crushed; carelessness.

July 15. Jno. Greenman, tramp, Wayne, fell under train, foot crushed; carelessness.

July 17. James Rietzer, citizen, Three Oaks, trespasser, struck by engine, arm and leg bruised; carelessness.

July 23. M. H. Wood, brakeman, Wayne, struck by stand-pipe, head cut, carelessness.

August 1. W. Bailey, brakeman, Detroit, struck by overhead bridge, head cut; want of caution.

August 1. H. Brown, citizen, Roscommon, attempted to get on moving train, skull fractured; carelessness.

August 1. Jno. Prindleville, fireman, Jackson Junction, climbing between cars, foot bruised; carelessness.

August 3. H. Bigham, yardmaster, Jackson Junction, coupling, foot caught in pilot of engine, badly bruised; carelessness.

August 3. A. Ely, conductor, G. T. Junction, coupling, finger pinched, carelessness.

August 4. J. Bailey, sectionman, Comstock, struck by engine while on hand car, head injured; want of caution.

August 4. B. M. House, citizen, Niles, struck by engine, trespasser; carelessness.

August 5. W. Sagendorf, boy, Jackson, foot pinched between platforms of coaches; carelessness.

August 6. J. Van Orden, brakeman, Ann Arbor, coupling, two fingers taken off; carelessness.

August 13. H. Smith, switchman, Niles, coupling, both legs crushed; carelessness.

August 15. A. J. Scott, switchman, Detroit, coupling, hips bruised; carelessness.

August 15. C. Callicott, brakeman, Jackson Junction, coupling, finger badly bruised; carelessness.

August 26. Miss F. Amann, citizen, Jackson, struck by engine, two toes crushed, trespasser; carelessness.

August 27. J. Eddy, brakeman, Grayling, coupling, foot caught in frog, carelessness.

September 10. Wm. Keegan, brakeman, G. T. Junction, struck by engine, both legs crushed; carelessness.

September 12. Unknown woman, Inksters, struck by engine, scalp wound, trespasser; carelessness.

September 16. H. Cole, switchman, Jackson Junction, coupling, arm crushed; carelessness.

September 19. J. Mullaney, Jackson Junction, jumped from moving train, severely bruised; carelessness.

September 25. D. McLaws, engineer, Ann Arbor, hands bruised, bursting flue; accidental.

October 6. W. H. Harmon, switchman, Jackson Junction, struck by engine, turning switch, back injured; carelessness.

October 10. A. McCall, brakeman, Lansing, coupling, finger crushed; carelessness.

October 17. G. Van Farrell, brakeman, Ann Arbor, coupling, arm broken; carelessness.

October 18. E. Bailey, brakeman, Rochester, coupling; thumb jammed; carelessness.

October 19. Chas. West, switchman, Detroit, struck by overhead bridge, head cut; want of caution.

October 21. D. Foley, switchman, Detroit, coupling, hips squeezed; carelessness.

November 4. A Bateman, switchman, Detroit, coupling, finger pinched; carelessness.

November 5. E. J. Kinney, brakeman, Kalamazoo, coupling, thumb taken off; carelessness.

November 7. W. Alexander, passenger, West Bay City, slight injury to knee, derailment; accidental.

November 7. J. P. Rodgers, passenger, West Bay City, scalp wound, derailment; accidental.

November 10. F. W. Gardner, switchman, Niles, coupling, squeezed; carelessness.

November 11. J. Slight, brakeman, Detroit, squeezed between cars on main and side tracks, slightly injured; carelessness.

November 13. Geo. Van Tassel, brakeman, Ypsilanti, attempted to get on moving train, both legs cut off; carelessness.

November 25. Jno. Hurley, brakeman, Lapeer, coupling, finger crushed; carelessness.

November 26. Geo. H. Hopkins, brakeman, Chesaning, coupling, hand crushed; carelessness.

November 26. M. Scanlon, switchman, Detroit, coupling, arm crushed; carelessness.

November 26. C. H. Matteson, switchman, Jackson Junction, knocked from car, shoulder bruised; want of caution.

November 28. W. Edward, brakeman, Vandalia, coupling, finger crushed; carelessness.

November 30. W. D. Thyer, switchman, Jackson Junction, coupling, squeezed through hips; carelessness.

December 3. C. L. Baker, brakeman, Grand Rapids, run over by train, lost one foot; carelessness.

December 3. D. Ellis, citizen, Ypsilanti, run over at crossing, lost one foot; want of caution.

December 2. F. Le. Brown, brakeman, Galesburg, fell from moving train, cutting hip and bruising shoulder; want of caution.

December 6. C. Wood, brakeman, Albion, crushed finger, stand pipe, taking water; carelessness.

December 6. H. Hessmer, brakeman, Jackson Junction, coupling, finger crushed; carelessness.

December 6. A. Ollin, switchman, Detroit, coupling, hand crushed; carelessness.

December 6. P. Crippen, brakeman, North Saginaw, coupling, hand squeezed; carelessness.

December 8. A. Loveland, brakeman, Niles, coupling, finger bruised; carelessness.

December 10. J. Parsons, laborer, Jackson Junction, fell under engine, foot crushed; accidental.

December 14. H. Loomis, boy, Grand Junction, trying to get on moving train, foot crushed, trespasser; carelessness.

December 15. Jno. Anderson, immigrant, Swede, Bay City, jumped from moving train; carelessness.

December 16. D. McNeal, switchman, Jackson Junction, coupling, hand crushed; carelessness.

December 16. Wm. Dewitt, brakeman, Beaver Lake, coupling, finger jammed; carelessness.

December 16. W. H. Annis, brakeman, Lawton, coupling, hand bruised; carelessness.

December 18. B. Smith, conductor, Galien, dragged under pilot of engine, leg injured; carelessness.

December 19. —— Wood, brakeman, Scio, struck by water tank lever, head cut; carelessness.

December 19. A. Sweet, brakeman, Owosso, coupling, lost one finger; carelessness.

December 20. Chas. Hill, switchman, Saginaw City, coupling, jaw broken; carelessness.

December 21. B. Cherry, brakeman, Albion, fell on car, shoulder bruised; want of caution.

December 22. J. O. Pearson, tinsmith, W. B. City, loading wheels, two fingers jammed; carelessness.

December 22. Ed. Kellogg, switchman, Bay City, coupling, finger jammed; carelessness.

December 27. M. Kelly, laborer, Detroit, struck by engine, knocked off car, leg broken, trespasser; carelessness.

December 29. J. Henderson (supposed), citizen, Detroit, struck by C. S. engine, 17th street crossing, arm broken; want of caution.

December 31. J. Calligan, switchman, Jackson Junction, coupling, finger crushed; carelessness.

## TABULAR STATEMENT OF ACCIDENTS.

### ENTIRE SYSTEM.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | 1 | | | | | |
| Coupling cars | | 1 | | | 39 | |
| Derailments | 1 | | | 11 | 1 | |
| Falling from trains | 2 | 1 | | 1 | 8 | |
| Frogs | | | | | 2 | |
| Getting on and off trains | 1 | | 3 | 2 | 6 | 4 |
| Highway crossings | | | 2 | | | 3 |
| Miscellaneous | | 5 | | | 10 | 9 |
| Overhead obstructions | | | | | 2 | |
| Stealing rides | | | | | | |
| Trespassers | | | 15 | | | 13 |
| Total | 5 | 7 | 20 | 14 | 68 | 29 |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 58 |
| Same for Michigan, | 32 |
| Number of persons injured during the year on the entire line, | 211 |
| Same for Michigan, | 111 |
| Number of casualties purely accidental in Michigan, | 9 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 120 |
| Persons killed or injured in Michigan while intoxicated, | 10 |
| Trespassers and tramps killed or injured in Michigan, | 28 |
| Suicides in Michigan, | — |

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

Henry B. Ledyard, General Manager, Daniel A. Waterman, Auditor of the Michigan Central Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, HENRY B. LEDYARD,
D. A. WATERMAN.

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.
[L. S.] HENRY RUSSELL,
*Notary Public Wayne County, Mich.*

# ANNUAL REPORT

OF THE

# DETROIT & BAY CITY RAILROAD COMPANY,

BY MICHIGAN CENTRAL RAILROAD COMPANY, LESSEE.

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

The Detroit & Bay City Railroad was in effect leased to the Michigan Central Railroad Company from February 13th, 1881, inclusive, but was operated by the purchasing committee, under the foreclosure sale, from that date to March 31st, 1881; after which date the road was operated solely by the Michigan Central Railroad Company, Lessee.

The following report, therefore, is for the period of nine months, ending December 31st, 1881.

As the "Analysis of Earnings and Expenses" includes the business of the road for nine months only, an addendum statement is attached showing "Earnings and Expenses" for three months ending March 31st, 1881, which embraces all the information the Lessee can give of the business of the company for that period, and which added to the attached report gives amount of earnings and expenses for the entire year.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* CORNELIUS VANDERBILT, New York.
*Secretary,* EDWIN D. WORCESTER, New York.
*Treasurer,* EDWIN D. WORCESTER, New York.
*General Manager,* H. B. LEDYARD, Detroit, Mich.
*Assistant General Superintendent,* E. C. BROWN, Jackson, Mich.
*Division Superintendent,* W. A. VAUGHAN, Bay City, Mich.
*Superintendent of Telegraph,* C. C. REED, Jackson, Mich.
*Auditor,* D. A. WATERMAN, Detroit, Mich.
*General Passenger Agent,* O. W. RUGGLES, Chicago, Ill.
*General Freight Agent,* J. A. GRIER, Chicago, Ill.
*Attorney,* G. V. N. LOTHROP, Detroit, Mich.

## DIRECTORS.

CORNELIUS VANDERBILT, New York.
WM. K. VANDERBILT, New York.
AUGUSTUS SCHELL, New York.
SAMUEL F. BARGER, New York.
ASHLEY POND, Detroit, Mich.

Term expires May 4, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election,—No election yet held; on the 4th of May, 1882, will be the first one since articles of association were made.
Number of stockholders in Michigan at date of organization, 3
Amount of full-paid stock held in Michigan at same date, . $30,000 00
Date of annual meeting of stockholders,—First Tuesday after first Wednesday in May.
Fiscal year of company ends December 31st.
General offices of the company are located at Detroit, Mich., and New York city.

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## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, 9 months, . . . . . | | $524,072 53 |
| Total expense, including taxes, 9 months, . | $274,341 74 | |
| Net income, . . . . . | | $249,730 79 |
| Interest on funded debt, . . . . . | 126,556 38 | |
| Balance for the year, . . . . . | | $123,174 41 |
| Balance forward to next year, . . . . | 123,174 41 | |
| | $123,174 41 | $123,174 41 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, . | | | $2,000,000 00 |
| Par value of shares, . . . | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $2,000,000 00; | | | |
| No. of shares, . . . | 20,000 | | |
| Amount paid in on common, . . | | $2,000,000 00 | |
| Total amount paid in as per books of the company, . | | | 2,000,000 00 |

| | |
|---|---|
| Amount realized in property, | $2,000,000 00 |
| Amount paid in per mile of road owned by company, | $13,582 34 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due May 1st, 1902, interest eight per cent, payable May and November 1), | | $274,000 00 |
| First Mortgage Bonds (due May 1st, 1903, interest eight per cent, payable May and November), | | 150,000 00 |
| First Mortgage Bonds (due March 1st, 1931, interest at five per cent, payable March and September), | | 3,576,000 00 |
| Total amount of funded debt, | | $4,000,000 00 |
| Amount received from the same in property, | $4,000,000 00 | |
| Amount of debt liabilities per mile of road [147.25 miles], | | 27,164 69 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | 4,000,000 00 |

## COST OF ROAD AND EQUIPMENT.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment to Lessee, | *$3,541,038 89 |
| Average cost of same per mile, | 24,047 80 |
| Proportion of cost of road and equipment for Michigan, | 3,541,038 89 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $180,632 37 | |
| From through passengers, | None. | |
| From express and baggage, | 6,640 69 | |
| From mails, | 9,090 81 | |
| From other sources, passenger department, | 900 00 | |
| Total earnings, passenger department, | | $197,263 87 |
| Earnings per train mile run [113,288 miles], | $1 74 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $326,131 58 | |
| From through traffic, | None. | |
| From other sources, freight department, | None. | |
| Total earnings freight department, | | $326,131 58 |

* Represents amount paid by Lessee for the acquirement of the Detroit & Bay City Railroad.

| | | |
|---|---|---|
| Earnings per train mile run [198,810 miles], | $1 64 | |
| Total transportation earnings, | | $523,395 45 |
| Earnings per mile of road operated [151.50 miles], | $3,454 75 | |
| Earnings per train mile run, from all trains earning revenue [312,098 miles], | $1 68 | |
| Proportion of earnings for Michigan, | $523,395 45 | |
| Rents for use of road, stations, etc., | | 563 00 |
| Income from all other sources for 9 months ending December 31, 1881, | | 114 08 |
| | | $524,072 53 |
| Add as per additional report for total income from January 1 to March 31, 1881, | | $130,533 70 |
| Total income from all sources for year 1881, | | $654,606 23 |
| Proportion of income for Michigan, | $654,606 23 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track,—includes track rental, $2,541.16, | $31,628 08 |
| Renewal of rails, | 20,155 00 |
| Renewal of ties, | 1,902 23 |
| Repairs of bridges, including culverts and cattle guards, | 13,808 24 |
| Repairs of fences, road crossings, and signs, | 9,868 56 |
| Repairs of buildings, | 2,915 52 |
| Total, | $80,277 63 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $14,102 04 |
| Repairs of passenger cars, Repairs of freight cars, | 11,595 60 |
| Total, | $25,697 64 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $29,595 95 |
| Locomotive service, | 3,314 13 |
| Oil and waste, | 2,809 47 |
| Locomotive service, | 27,332 34 |
| Passenger train service, | 9,113 50 |
| Passenger train supplies, | 809 92 |

| | |
|---|---|
| Freight train service, | $8,838 03 |
| Freight train supplies, | 2,007 50 |
| Mileage of freight cars (debit balance), | 4,830 10 |
| Telegraph expenses (maintenance and operating), | 5,324 38 |
| Damage and loss of freight and baggage, | 1,117 12 |
| Damages to property and cattle, | 2,809 11 |
| Personal injuries, | 12,235 00 |
| Agents and station service, | 19,991 26 |
| Station supplies, | 1,201 23 |
| Total, | $131,329 04 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | See report of M. C. R. R. Co. |
| Salaries of clerks in general offices, | |
| Law expenses, | $978 89 |
| Stationery and printing, | 1,286 04 |
| Outside agencies and advertising, | 10,278 44 |
| Contingencies, | 10,919 17 |
| Taxes in Michigan, | 13,574 89 |
| Total, | $37,037 43 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $80,277 63 |
| Maintenance of motive power and cars, | | 25,697 64 |
| Conducting transportation, | | 131,329 04 |
| General expenses, including taxes, | | 37,037 43 |
| Total operating expenses and taxes, 9 months ending December 31st, 1881. | | $274,341 74 |
| Operating expenses and taxes per mile of road, | $1,810 84 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [312,098 miles], | $0 88 | |
| Proportion of operating expenses and taxes for Michigan, | $274,341 74 | |
| Per centage of expenses to earnings, | 52.42 | |
| Net earnings per mile of road, | $1,648 39 | |
| Net earnings per train mile, | $0 80 | |
| Add, as per addenda, for expenses from January 1, 1881, to March 31, 1881, | | 104,706 50 |
| Total expenses for year 1881, | | $379,048 24 |
| Net earnings for year 1881, | | 275,557 99 |

## ADDENDUM.

*Statement of Earnings and Expenses Detroit & Bay City Railroad for Three Months ending March 31st, 1881. (See Note, Page 320.)*

### ANALYSIS OF EARNINGS AND EXPENSES.

#### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $47,389 79 | |
| From through passengers, | | |
| From express and baggage, | 1,533 19 | |
| From mails, | 3,052 62 | |
| From other sources, passenger department, | 300 00 | |
| Total earnings, passenger department, | | $52,275 60 |

#### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $78,013 60 | |
| From through freight, | | |
| Total earnings, freight department, | | $78,031 60 |
| Total transportation earnings, | | $130,289 20 |
| Proportion of earnings for Michigan, | $130,289 20 | |
| Income from other sources, | | 244 50 |
| Total income from all sources, 3 months to March 31st, | | $130,533 70 |
| Proportion of income for Michigan, | $130,533 70 | |

#### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $31,150 97 |
| Renewal of rails, | |
| Renewal of ties, | |
| Repairs of bridges, including culverts and cattle guards, | 4,268 07 |
| Repairs of fences, road crossings, and signs, | 115 85 |
| Repairs of buildings, | 895 90 |
| Total, | $36,430 79 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $4,887 38 |
| Repairs of passenger cars, | 6,062 75 |
| Repairs of freight cars, | |
| Total, | $10,950 13 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $18,619 02 |
| Water-supply, | 832 66 |
| Oil and waste, | 1,848 94 |
| Locomotive service, | 8,070 06 |
| Train service and supplies, | 8,284 61 |
| Mileage of freight cars (debit balance), | 2,068 02 |
| Telegraph expenses (maintenance and operating), | 1,687 04 |
| Damage and loss of freight and baggage, | 206 16 |
| Damages to property and cattle, | 499 03 |
| Personal injuries, | 91 00 |
| Agents and station service, and supplies, | 8,259 50 |
| Total, | $50,466 04 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Law expenses, | $263 19 |
| Stationery and printing, | 626 25 |
| Outside agencies and advertising, | 1,823 62 |
| Contingencies, | 4,148 48 |
| Total, | $6,859 54 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $36,430 79 |
| Maintenance of motive power and cars, | 10,950 13 |
| Conducting transportation, | 50,466 04 |
| General expenses, including taxes, | 6,859 54 |
| Total operating expenses and taxes, January 1st to March 1st, 1881, | $104,706 50 |

Proportion of operating expenses and taxes for Michigan, $104,706 50

ASSETS AND LIABILITIES.

Immediately on sale of Detroit & Bay City Railway in February, 1881, the road was leased to the Michigan Central Railroad Company, and no books have been opened by the new organization—so there are no "Assets and Liabilities" to report.

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Detroit to Bay City, July 31, 1873.
From Detroit to Caro, July 22, 1878.
From Detroit to East Saginaw, January 25, 1879.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan: | | |
| Detroit to Bay City, | 108 00 | |
| Bay City to West Bay City "Y," | 1 00 | |
| Total length completed, | | 109 00 |

BRANCHES.

| | | |
|---|---|---|
| Lapeer & Northern Branch, from Lapeer to Five Lakes, | 8 75 | |
| Saginaw Branch, from Denmark Junction to East Saginaw, | 16 75 | |
| Caro Branch, from Vassar to Caro, | 12 75 | |
| Total length of branches owned by company, | | 38 25 |
| Total length of branches owned by company in Michigan, | 38 25 | |
| Total length of road belonging to this company, | | 147 25 |
| Total length of road belonging to this company in Michigan, | 147 25 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 17 12 |
| Same in Michigan, | 17 12 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 164 37 |
| Same in Michigan, | 164 37 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard 60 lbs., | | 72 23 |
| Total length of track laid with iron rails, weight per yard 60 lbs., | | 92 14 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | | |
|---|---|---|
| Name, description, and length of each: | | |
| Bay City Street and Transfer Railway, | 4 25 | |
| Total length of above roads, | | 4 25 |
| Total length of above roads in Michigan, | 4 25 | |
| Total miles of road operated by this company, | | 151 50 |
| Total miles of road operated by this company in Michigan, | 151 50 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 62; aggregate length, feet, | 5,635 |
| Stone bridges, number of, | 2; aggregate length, feet, | 411 |
| Wooden trestles, number of, | 4; aggregate length, feet, | 1,411 |
| Total, | 68 | 7,457 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 162 |
| Stone, number, | 9 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 295 |
| Number of cattle guards renewed during the year, | 16 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Detroit, Monroe & Toledo R. R., near Detroit, Mich.
Grand Trunk R. R., near Detroit, Mich.
Detroit, Grand Haven & Milwaukee R. R., near Detroit, Mich.
Michigan Air Line R. R., near Rochester, Mich.
Chicago & Grand Trunk R. R., at Lapeer.
Flint & Pere Marquette R. R., at Otter Lake, Bay City, East Saginaw.
Port Huron & Northwestern R. R., at Vassar.
Saginaw, Tuscola & Huron R. R., at Reese.

What railroads cross your road either over or under your grade in this State, and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 174 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 4 |
| Number of crossings of highways at grade in this State without signs, | None |
| Number of crossings of highways over railroad, | - |
| Number of crossings of highways under railroad, | - |
| Number of highway bridges 18 feet above track, | - |
| Number highway bridges less than 18 feet above track, | 1 |
| Have safety-guards been erected at over-head obstructions, | None. |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 286 50 |
| What is the average cost per rod? | $1 25 | |
| The total cost of same? | $114,600 00 | |
| How many miles of new fencing have you built during the year? (Renewed), | | 43.86 |

Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road:
In Saginaw county, 1.80 miles swamp land.
In Lapeer county, 3 miles Lapeer & Northern Branch.

| | |
|---|---|
| Total miles, | 4.80 |

## REPAIRS AND RENEWALS.

### *Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 28 |
| Average length of sections,—miles, | 5.28 |
| Average number of men in each section gang, | 3½ |
| Number of new ties put in whole line during the year, | 7,650 |
| Number of new ties put in track in Michigan, | 7,650 |
| Average number of new ties per mile of road, | 52 |
| New rails put in track: | |
| Steel [tons 1,411] miles, | |
| Total miles of track laid with new rails, | 15.73 |

Between what points were new rails laid:

Only 1,000 tons of this steel was "new" steel, the cost of which is included in amount charged to construction,—balance consists mainly of second-class steel taken from main line, laid between Lapeer and Columbiaville, and Utica and Warren.

## ROLLING STOCK.

Included in report of M. C. R. R. Co.

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during 9 months, | 113,288 |
| Miles run by freight trains during 9 months, | 198,810 |
| Total mileage of trains earning revenue, 9 months, | 312,098 |
| Miles run by work trains during 9 months | 10,450 |
| Miles run by switching trains,* | 53,944 |
| Total train mileage, | 376,492 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3½ |
| Average weight of passenger trains, exclusive of passengers, including locomotives,—tons, | 111 |
| Average number of cars in freight trains, | 21 |
| Average weight of freight trains, exclusive of freight, including locomotives,—tons, | 254 |

### *Passenger Traffic.*

See report of M. C. R. R. Co.

* No allowance to passenger and freight trains for switching.

*Freight Traffic.*

See report of M. C. R. R. Co.

*Tonnage of Articles Transported.*

See report of M. C. R. R. Co.

ADDITIONAL QUESTIONS.

*Express Companies.*

See report of M. C. R. R. Co.

*Transportation Companies.*

See report of M. C. R. R. Co.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid each?
See report of M. C. R. R. Co.

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?
See report of M. C. R. R. Co.
What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?
See report of M. C. R. R. Co.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?
See report of M. C. R. R. Co.

*Telegraph.*

Number of miles of telegraph owned by company, - - -
What other company, if any, owns a line of telegraph on your right of way and how many miles does each own?
See report of M. C. R. R. Co.

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR.

Included in report of M. C. R. R. Co.

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

Henry B. Ledyard, General Manager, Daniel A. Waterman, Auditor, of the Michigan Central Railroad Company, Lessee of the Detroit & Bay City Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed) HENRY B. LEDYARD,
D. A. WATERMAN.

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.
(L. S.) HENRY RUSSELL,
*Notary Public Wayne County, Michigan.*

# ANNUAL REPORT

OF THE

# GRAND RIVER VALLEY RAILROAD COMPANY,

BY MICHIGAN CENTRAL RAILROAD COMPANY, LESSEE,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* AMOS ROOT, Jackson, Mich.
*Vice President,* M. A. McNAUGHTON, Jackson, Mich.
*Secretary aad Treasurer,* E. W. BARBER, Jackson, Mich.
*General Manager,* H. B. LEDYARD, Detroit, Mich.
*Assistant General Superintendent,* E. C. BROWN, Jackson, Mich.
*Division Superintendent,* C. B. BUSH, Jackson, Mich.
*Superintendent of Telegraph,* C. C. REED, Jackson, Mich.
*Auditor,* D. A. WATERMAN, Detroit, Mich.
*General Passenger Agent,* O. W. RUGGLES, Chicago, Ill.
*General Freight Agent,* J. A. GRIER, Chicago, Ill.
*Attorney,* G. V. N. LOTHROP, Detroit, Mich.

## DIRECTORS.

AMOS ROOT, Jackson, Mich.
MOSES A. McNAUGHTON, Jackson, Mich.
WM. H. WITHINGTON, Jackson, Mich.
AUSTIN BLAIR, Jackson, Mich.
EDWARD W. BARBER, Jackson, Mich.
EDWARD S. LACEY, Charlotte, Mich.
NATHAN BARLOW, Hastings, Mich.

Term expires October 3d, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 38 |
| Number of stockholders in Michigan at same date, - - | 28 |

Amount of full-paid stock held in Michigan at same date, . $325,850 00
Date of annual meeting of stockholders,—First Monday of October.
Fiscal year of company ends December 31st.
General offices of the company are located at Jackson, Detroit, Mich.

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## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $342,643 09 |
| Total expense, including taxes, | $238,870 89 | |
| Net income, | | $103,772 20 |
| Interest on funded debt, | $110,000 00 | |
| Rentals, | 24,560 00 | |
| Balance for the year,—deficit, | $30,787 80 | |
| Balance (loss) last year, | $464,833 97 | |
| Balance forward to next year, | | 495,621 77 |
| | $495,621 77 | $495,621 77 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $1,000,000 00 |
| Par value of shares, | $50 00 | | |
| Amount issued, $491,200.00, No. of shares, | 9,824 | | |
| Amount paid in on common, | | $491,200 00 | |
| Amount paid in on preferred, | | None. | |
| Total amount paid in as per books of the company, | | | 491,200 00 |
| Amount paid in per mile of road owned by company, | | 5,847 62 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1886, interest 8 per cent, payable January and July), | $1,000,000 00 |
| Mortgage Bonds (due 1909, interest six per cent, payable March and September), | 500,000 00 |
| Total amount of funded debt, | $1,500,000 00 |

FLOATING DEBT.

Not known to Lessee.

| | |
|---|---|
| Total debt liabilities, | $1,500,000 00 |
| Amount of debt liabilities per mile of road [84 miles], | $17,857 14 |

COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction,—estimated, | $2,852,596 66 |
| Average cost of construction per mile of road not including sidings, [84 miles], | 33,959 48 |
| Proportion of cost of construction for Michigan, | 2,852,596 66 |

*Cost of Equipment.*

Equipment owned and reported by M. C. R. R. Co.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment,—estimated, | $2,852,596 66 |
| Average cost of same per mile, | 33,959 48 |
| Proportion of cost of road and equipment for Michigan, | 2,852,596 66 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Land, | $4,650 00 |
| Total charges to property account during the year, | $4,650 00 |
| Net addition to property account for the year, | $4,650 00 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $147,929 13 | |
| From express and baggage, | 2,117 67 | |
| From mails, | 8,803 68 | |
| From other sources, passenger department, | 240 00 | |
| Total earnings, passenger department, | | $159,090 48 |
| Earnings per train mile run [159,844 miles], | $1 00 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $179,046 04 | |
| Total earnings, freight department, | | $179,046 04 |

| | | |
|---|---|---|
| Earnings per train mile run [133,627 miles], | $1 34 | |
| Total transportation earnings, | | $338,136 62 |
| Earnings per mile of road operated [84 miles], | $4,025 43 | |
| Earnings per train mile run, from all trains earning revenue [293,471 miles], | $1 15 | |
| Proportion of earnings for Michigan, | $338,136 52 | |
| Rents for use of road, stations, etc. | | 4,506 57 |
| Total income from all sources, | | $342,643 09 |
| Proportion of income for Michigan, | $342,643 09 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track,—includes track rental, 540, | $26,738 17 |
| Renewal of rails, | 15,512 50 |
| Renewal of ties, | 9,411 15 |
| Repairs of bridges, including culverts and cattle guards, | 1,961 52 |
| Repairs of fences, road-crossings, and signs, | 5,161 42 |
| Repairs of buildings, | 2,839 93 |
| Total, | $61,624 69 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $16,568 32 |
| Repairs of passenger cars, Repairs of freight cars, | 15,624 21 |
| Total, | $32,192 53 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, includes fuel for machine shops, etc., $303.75, | $24,218 72 |
| Water-supply, | 3,568 48 |
| Oil and waste, | 3,276 87 |
| Locomotive service, | 24,848 47 |
| Passenger train service, | 12,128 81 |
| Passenger train supplies, | 1,166 50 |
| Freight train service, | 5,235 51 |
| Freight train supplies, | 283 96 |
| Mileage of freight cars (debit balance), | 7,300 53 |
| Telegraph expenses (maintenance and operating), | 3,486 51 |
| Damage and loss of freight and baggage, | 812 98 |
| Damages to property and cattle, | 802 99 |

| | |
|---|---|
| Personal injuries, | $273 85 |
| Agents and station service, | 22,053 75 |
| Station supplies, | 1,194 30 |
| Total, | $110,652 23 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | See report of M. C. R. R. Co. |
| Salaries of clerks in general offices, | |
| Law expenses, | $760 56 |
| Stationery and printing, | 1,169 78 |
| Outside agencies and advertising, | 7,381 76 |
| Contingencies, | 8,119 70 |
| Taxes in Michigan, | 16,969 64 |
| Total, | $34,401 44 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $61,624 69 |
| Maintenance of motive power and cars, | 32,192 53 |
| Conducting transportation, | 110,652 23 |
| General expenses, including taxes, | 34,401 44 |
| Total operating expenses and taxes, | $238,870 89 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $2,843 70 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [293,471 miles], | $0 81 | |
| Proportion of operating expenses and taxes for Michigan, | $238,870 89 | |
| Per centage of expenses to earnings, [76.43] | | |
| Net earnings per mile of road, | $1,181 73 | |
| Net earnings per train mile, | 0 34 | |

ASSETS AND LIABILITIES.

The Michigan Central Railroad Company, Lessee, having no access to the books of its leased line, the "Grand River Valley Railroad," is unable to make up statement of "Assets and Liabilities," as herein required.

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Rives Junction to Grand Rapids, 1870.

MAIN LINE.

| | | |
|---|---|---|
| Length completed in Michigan, | 84 00 | |
| Total length completed, | | 84 00 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Total length of road belonging to this company, | | 84 00 |
| Total length of road belonging to this company in Michigan, | 84 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 9 37 |
| Same in Michigan, | 9 37 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 93 37 |
| Same in Michigan, | 93 37 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard, 60 lbs., | | 53 53 |
| Total length of track laid with iron rails, weight per yard, 60 lbs., | | 39 84 |
| Total miles of road operated by this company, | | 84 00 |
| Total miles of road operated by this company in Michigan, | 84 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 11; aggregate length, feet, | | 1,793 |
| Wooden trestles, number of, 15; aggregate length, feet, | | 1,050 |
| Total, | 26 | 2,843 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 104 |
| Stone, number, | 6 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 147 |
| Number of cattle guards renewed during the year, | 20 |

*Crossings,—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Northern Central Michigan R. R., at Eaton Rapids, Mich.
Chicago & Grand Trunk R. R., at Charlotte, Mich.

| | |
|---|---|
| What railroads cross your road either over or under your grade in this State, and where? | None. |
| Number of crossings of highways at grade in this State without protection, | 98 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | None. |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | None. |
| Number of crossings of highways under railroad, | None. |
| Number of highway bridges 18 feet above track, | None. |

| | |
|---|---|
| Number of highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions? | None. |

*Stations.*

See report of M. C. R. R. Co.

*Employés.*

See report of M. C. R. R. Co.

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 168 |
| What is the average cost per rod?—Estimated, | $1 00 | |
| The total cost of same? | $53,760 00 | |
| How many miles of new fencing have you built during the year?—Renewed, | | 25.10 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 20 |
| Average length of sections, miles, | 4.19 |
| Average number of men in each section gang, | 3 |
| Number of new ties put in whole line during the year, | 30,115 |
| Number of new ties put in track in Michigan, | 30,115 |
| Average number of new ties per mile of road, | 360 |
| New rails put in track: | |
| Steel [tons 809] miles, | 8.58 |
| Total miles of track laid with new rails, | 8.58 |

Between what points were new rails laid:
South and north of Hastings. All second-class steel from main line.

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 97,230 |
| Timber culverts replaced with timber—[number 7], timber used (feet B. M.), | 46,800 |
| New bridges built during year,—number, | None. |

ROLLING STOCK.

See report of M. C. R. R. Co.

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 159,844 |
| Miles run by freight trains during the year, | 133,627 |
| Total mileage of trains earning revenue, | 293,471 |
| Miles run by work trains during the year, | 16,502 |
| Miles run by switching trains,* | 46,330 |
| Total train mileage, | 356,303 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 2½ |
| Average weight of passenger trains, exclusive of passengers,—including locomotive,—tons, | 88 |
| Average number of cars in freight trains, | 23 |
| Average weight of freight trains, exclusive of freight, including locomotives,—tons, | 279 |

### *Passenger Traffic.*

See report of M. C. R. R. Co.

### *Freight Traffic.*

See report of M. C. R. R. Co.

### *Tonnage of Articles Transported.*

See report of M. C, R. R. Co.

## ADDITIONAL QUESTIONS,

### *Express Companies.*

See report of M. C. R. R. Co.

### *Transportation Companies.*

See report of M. C. R. R. Co.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

* No allowance to passenger and freight trains for switching.

See report of M. C. R. R. Co.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

See report of M. C. R. R. Co.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

See report of M. C. R. R. Co.

*Telegraph.*

Number of miles of telegraph owned by company, - -

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

See report of M. C. R. R. Co.

REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

See report of M. C. R. R. Co.

STATE OF MICHIGAN, } ss.
COUNTY OF WAYNE, }

Henry B. Ledyard, General Manager, Daniel A. Waterman, Auditor of the Michigan Central Railroad Company, Lessee of the Grand River Valley Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), HENRY B. LEDYARD,
D. A. WATERMAN.

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.

[L. S.] HENRY RUSSELL,
*Notary Public Wayne County, Mich.*

# ANNUAL REPORT

OF THE

# JACKSON, LANSING & SAGINAW RAILROAD COMPANY,

BY MICHIGAN CENTRAL RAILROAD COMPANY, LESSEE,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, HENRY A. HAYDEN, Jackson, Mich.
*Secretary*, ORLANDO M. BARNES, Lansing, Mich.
*Treasurer*, WM. D. THOMPSON, Jackson, Mich.
*General Manager*, H. B. LEDYARD, Detroit, Mich.
*Assistant General Superintendent*, E. C. BROWN, Jackson, Mich.
*Division Superintendent*, W. A. VAUGHAN, Bay City, Mich.
*Superintendent of Telegraph*, C. C. REED, Jackson, Mich.
*Auditor*, D. A. WATERMAN, Detroit, Mich.
*General Passenger Agent*, O. W. RUGGLES, Chicago, Ill.
*General Freight Agent*, J. A. GRIER, Chicago, Ill.
*Attorney*, G. V. N. LOTHROP, Detroit, Mich.

## DIRECTORS.

CORNELIUS VANDERBILT, New York.
AUGUSTUS SCHELL, New York.
JAMES F. JOY, Detroit, Mich,
HENRY A. HAYDEN, Jackson, Mich.
WM. D. THOMPSON, Jackson, Mich.
PETER B. LOOMIS, Jackson, Mich.
ORLANDO M. BARNES, Lansing, Mich.

Term expires, March, 1883.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, . . . | 32 |
| Number of stockholders in Michigan at same date, . . | 26 |

Amount of full-paid stock held in Michigan at same date. - $17,784 50
Date of annual meeting of stockholders,—First Wednesday in March.
Fiscal year of company ends December 31st.
General offices of the company are located at Lansing, Mich., and Detroit, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $980,718 26 |
| Total expense, including taxes, | $760,000 27 | |
| Net income, | | $220,717 99 |
| Interest on funded debt, | 283,840 00 | |
| Rentals, | 70,750 00 | |
| Balance for the year,—deficit, | $133,872 01 | |
| Balance (loss) last year, | 683,079 92 | |
| Balance forward to next year, | | 816,951 93 |
| | $816,951 93 | $816,951 93 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $2,500,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $1,986,790.00; | | | |
| No. of shares, | 19,867 $\frac{90}{100}$ | | |
| Amount paid in on common, | | $1,986,790 00 | |
| Total amount paid in as per books of the Company, | | | $1,986,790 00 |
| Amount paid in per mile of road owned by company, | | $8,571 14 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due July 1st, 1885, interest eight per cent, payable January and July), | 1,277,000 00 |
| Northern Extension Bonds (due September 1st, 1891, interest six per cent, payable March and September), | 1,100,000 00 |
| Consolidated Mortgage Bonds (due September 1st, 1891, interest at eight per cent, payable March and September), | 1,943,000 00 |
| Total amount of funded debt, | $4,320,000 00 |
| Total debt liabilities, | $4,320,000 00 |

| | |
|---|---|
| Amount of debt liabilities per mile of road [294.80 miles], | $14,654 00 |

COST OF ROAD AND EQUIPMENT.

The Lessees have to report the construction, during the year 1881, of the "Northern Extension" of the Jackson, Lansing & Saginaw Railroad from Gaylord's to Mackinac City, about 63 miles.

The following amounts were expended by Lessees for said construction from proceeds of bonds issued by Jackson, Lansing & Saginaw Railroad Company, —showing the cost to December 31st, 1881.

| | |
|---|---|
| Grading and Masonry, | $177,048 23 |
| Bridging, | 24,610 67 |
| Superstructure (including rails), | 470,286 31 |
| Land, land damages and fences, | 14,439 52 |
| Passenger and freight stations, woodsheds, etc., | 40,123 40 |
| Engine houses, car sheds and turn-tables, | 846 59 |
| Engineering, etc., | 47,494 69 |
| Other items, | 106,156 13 |
| Total cost to December 31st, 1881, | $881,005 54 |
| Average cost per mile (63 miles), | 13,984 21 |

There was no traffic on this extension during the year 1881.

| | |
|---|---|
| Total expended for construction, Jackson to Gaylord,—estimated, | $6,929,286 77 |
| Average cost of construction per mile of road (not including sidings), [231.80 miles], | 29,893 38 |
| Proportion of cost of construction for Michigan, | 6,929,286 77 |

*Cost of Equipment.*

Equipment owned and reported by M. C. R. R. Co.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, Jackson to Gaylord—estimated, | $6,929,286 77 |
| Average cost of same per mile, | 29,893 38 |
| Proportion of cost of road and equipment for Michigan, | 6,929,286 77 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Double track extension, 1 mile second track between Lansing and North Lansing, | $6,301 59 |
| Land, | 1,500 00 |
| Total charges to property account during the year, | $7,801 59 |
| Net addition to property account for the year, | $7,801 59 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $353,618 34 | |
| From through passengers, | | |
| From express and baggage, | 6,588 08 | |
| From mails, | 16,421 88 | |
| From other sources, passenger department, | 240 00 | |
| Total earnings, passenger department, | | $376,868 30 |
| Earnings per train mile run [229,030 miles], | $1 65 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $598,814 70 | |
| From through traffic, | | |
| Total earnings, freight department, | | 598,814 70 |
| Earnings per train mile run [370,046 miles], | $1 62 | |
| Total transportation earnings, | | $975,683 00 |
| Earnings per mile of road operated [231.80 miles], | $4,209 16 | |
| Earnings per train mile run, from all trains earning revenue [599,076 miles], | $1 63 | |
| Proportion of earnings for Michigan, | $975,683 00 | |
| Rents for use of road, stations, etc., | 3,223 07 | |
| Income from all other sources, | 1,812 19 | 5,035 26 |
| Total income from all sources, | | $980,718 26 |
| Proportion of income for Michigan, | $980,718 26 | |

### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, estimated (includes track rental, $2,897.34), | $73,485 37 |
| Renewal of rails, | 226,915 00 |
| Renewal of ties, | 21,360 42 |
| Repairs of bridges, including culverts and cattle guards, | 12,807 71 |
| Repairs of fences, road-crossings, and signs, | 11,889 66 |
| Repairs of buildings, | 10,818 30 |
| Total, | $357,276 46 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $33,956 41 |
| Repairs of passenger cars, Repairs of freight cars, | 38,195 38 |
| Total, | $72,151 79 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives (includes fuel for machine shops, etc., $1,639.58), | $64,918 70 |
| Water-supply, | 10,546 94 |
| Oil and waste, | 7,271 91 |
| Locomotive service, | 49,515 90 |
| Passenger train service, | 15,092 13 |
| Passenger train supplies, | 2,518 73 |
| Freight train service, | 31,294 07 |
| Freight train supplies, | 1,974 46 |
| Mileage of freight cars (debit balance), | 18,177 23 |
| Telegraph expenses (maintenance and operating), | 13,976 65 |
| Damage and loss of freight and baggage, | 2,247 93 |
| Damages to property and cattle, | 2,485 24 |
| Personal injuries, | 949 25 |
| Agents and station service, | 40,503 63 |
| Station supplies, | 3,951 91 |
| Total, | $265,424 68 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, Salaries of clerks in general offices, | See report of M. C. R. R. Co. |
| Law expenses, | 2,094 03 |
| Stationery and printing, | 1,839 77 |
| Outside agencies and advertising, | 20,429 56 |
| Contingencies, | 22,419 01 |
| Taxes in Michigan, | 18,364 97 |
| Total, | $65,147 34 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $357,276 46 |
| Maintenance of motive power and cars, | 72,151 79 |
| Conducting transportation, | 265,424 68 |
| General expenses, including taxes, | 65,147 34 |
| Total operating expenses and taxes, | $760,000 27 |

Operating expenses and taxes per mile of road, $3,278 69

| | | |
|---|---|---|
| Operating expenses and taxes per train mile run, for trains earning revenue [599.076 miles], | | $1 27 |
| Proportion of operating expenses and taxes for Michigan, | | $760,000 27 |
| Per centage of expenses to earnings, | 77.89 | |
| Net earnings per mile of road, | | $930 47 |
| Net earnings per train mile, | | $0 36 |

## ASSETS AND LIABILITIES.

The Michigan Central Railroad Company, Lessee, having no access to the books, of its leased line, the "Jackson, Lansing & Saginaw Railroad," is unable to present a statement of "Assets and Liabilities," as herein required.

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Jackson to Gaylord, July, 1873.
From Gaylord to Mackinac City, December 31, 1881.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, from Jackson to Mackinac City, | 294 80 | |
| Total length completed, | | 294 80 |
| Length of double track on main line, between Lansing and North Lansing, | 1 00 | 1 00 |
| Total length of road belonging to this company, | | 294 80 |
| Total length of road belonging to this company in Michigan, | 294 80 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated. | | 45 97 |
| Same in Michigan, | 45 97 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 341 77 |
| Same in Michigan, | 341 77 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 60 lbs., | 174 92 | |
| Total length of tracks laid with iron rails, weight per yard, 60 lbs. | 166 85 | |
| Total miles of road operated by this company, Jackson to Gaylord, | | 231 80 |
| Total miles of road operated by this company in Michigan, | 231 80 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 96; aggregate length, feet, | 6,151 |
| Iron bridges, number of, | 2; aggregate length, feet. | 150 |
| Wooden trestles, number of, | 3; aggregate length, feet, | 273 |
| Total, | 101 | 6,574 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 359 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 273 |
| Number of cattle guards renewed during the year, | 42 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Chicago & Grand Trunk R. R., at Lansing, Mich.
Detroit, Grand Haven & Milwaukee R. R., at Owosso, Mich.
Flint & Pere Marquette R. R., at East Saginaw, Mich.
Glencoe & Pinconning R. R., at Pinconning.

What railroads cross your road either over or under your grade in this State and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 254 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 5 |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | 2 |
| Number of crossings of highways under railroad, | None. |
| Number of highway bridges 18 feet above track, | 2 |
| Number of highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions? | Yes. |

*Stations.*

See report of M. C. R. R. Co.

*Employés.*

See report of M. C. R. R. Co.

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 262.98 |
| What is the average cost per rod? | |
| Gaylord to Mackinac City. | $0 87½ |
| Jackson to Gaylord, | 40 |

| | | |
|---|---|---|
| The total cost of same? | | |
| Gaylord to Mackinac City, | $780 50 | |
| Jackson to Gaylord, | 32,947 20 | |
| How many miles of new fencing have you built during the year? | | |
| Renewed, between Jackson and Gaylord, | | 67.34 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | | |
| Bay county, | | 65.88 |
| Ogemaw county, | | 37.95 |
| Roscommon county, | | 29.94 |
| Crawford county, | | 56.27 |
| Otsego county, | | 24.00 |
| Shiawassee county, | | .56 |
| Gaylord to Mackinac City, | | 120.42 |
| Total miles, | | 335.02 |

## REPAIRS AND RENEWALS.

### *Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 66 |
| Average length of sections,—miles, | 4.4 |
| Average number of men in each section gang, | 3 |
| Number of new ties put in whole line during the year, | 257,049 |
| Number of new ties put in track in Michigan, | 257,049 |
| Average number of new ties per mile of road: | |
| Between Jackson and Gaylord, | 420 |
| Between Gaylord and Mackinac, | 2,529 |
| New rails put in track: | |
| Iron [tons —— ] miles, | None. |
| Steel [tons 6,252] miles,—Jackson to Gaylord, | 62.30 |
| Total miles of track laid with new rails, | 62.30 |

Between what points were new rails laid:

Between Lansing and St. Charles, and south of West Branch.

Two thousand tons of this was new steel, balance second-class taken from main line.

### *Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges and culverts during the year (feet B. M.), | 256,628 |
| Timber culverts replaced with timber—[number, 11], timber used (feet B. M.), | 93,680 |

New bridges built during the year,—number:

Forty-nine wooden bridges between Gaylord and Mackinac City.

## ROLLING STOCK.

Rolling stock owned and reported by the M. C. R. R. Co.

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 229,030 |
| Miles run by freight trains during the year, | 370,046 |
| Total mileage of trains earning revenue, | 599,076 |
| Miles run by work trains during the year, | 29,320 |
| Miles run by switching trains,* | 104,089 |
| Total train mileage, | 732,485 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 4.33 |
| Average weight of passenger trains, exclusive of passengers, including locomotives,—tons, | 129 |
| Average number of cars in freight trains, | 22.79 |
| Average weight of freight trains, exclusive of freight, including locomotives,—tons, | 278 |

### *Passenger Traffic.*

See report of M. C. R. R. Co.

### *Freight Traffic.*

See report of M. C. R. R. Co.

### *Tonnage of Articles Transported.*

See report of M. C. R. R. Co.

## ADDITIONAL QUESTIONS.

### *Express Companies.*

See report of M. C. R. R. Co.

### *Transportation Companies.*

See report of M. C. R. R. Co.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

* No allowance to passenger and freight trains for switching.

See report of M. C. R. R. Co.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

See report of M. C. R. R. Co.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

See report of M. C. R. R. Co.

*Telegraph.*

Number of miles of telegraph owned by company, - -

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

See report of M. C. R. R. Co.

REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

See report of M. C. R. R. Co.

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

Henry B. Ledyard, General Manager, Daniel A. Waterman, Auditor, of the Michigan Central Railroad Company, Lessee of the Jackson, Lansing & Saginaw Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), HENRY B. LEDYARD,
D. A. WATERMAN,

Subscribed and sworn to before me, this 4th day of May, A. D. 1882.

[L. S.] HENRY RUSSELL,
*Notary Public Wayne County, Mich.*

# ANNUAL REPORT

OF THE

# KALAMAZOO & SOUTH HAVEN RAILROAD COMPANY,

BY MICHIGAN CENTRAL RAILROAD COMPANY, LESSEE,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ASHLEY POND, Detroit, Mich.
*Secretary and Treasurer*, D. A. WATERMAN, Detroit, Mich.
*General Manager*, H. B. LEDYARD, Detroit, Mich.
*Assistant General Superintendent*, E. C. BROWN, Jackson, Mich.
*Division Superintendent*, C. B. BUSH, Jackson, Mich.
*Superintendent of Telegraph*, C. C. REED, Jackson, Mich.
*Auditor*, D. A. WATERMAN, Detroit, Mich.
*General Passenger Agent*, O. W. RUGGLES, Chicago, Ill.
*General Freight Agent*, J. A. GRIER, Chicago, Ill.
*Attorney*, G. V. N. LOTHROP, Detroit, Mich.

## DIRECTORS.

CORNELIUS VANDERBILT, New York.
EDWIN D. WORCESTER, New York.
ASHLEY POND, Detroit, Mich.
HENRY B. LEDYARD, Detroit, Mich.
G. V. N. LOTHROP, Detroit, Mich.
HENRY RUSSELL, Detroit. Mich.
DANIEL A. WATERMAN, Detroit, Mich.
A. L. OSBORNE, Chicago, Ill.
S. S. COBB, Kalamazoo, Mich.
ALLEN POTTER, Kalamazoo, Mich.
L. B. KENDALL, Kalamazoo, Mich.
GEO. HANNAHS, South Haven, Mich.
GEO. N. HALE, South Haven, Mich,

Term expires March 8th, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 201 |
| Number of stockholders in Michigan at same date, | 123 |
| Amount of full-paid stock held in Michigan at same date, | $325,100 |

Date of annual meeting of stockholders,—Second Wednesday in March.
Fiscal year of company ends December 31.
General offices of the company are located at Kalamazoo and Detroit, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $70,254 18 |
| Total expense, including taxes, | $50,623 42 | |
| Net income, | | $19,630 76 |
| Interest on funded debt, | 56,800 00 | |
| Balance for the year,—deficit, | $37,169 24 | |
| Balance (loss) last year, | 247,457 65 | |
| Balance forward to next year, | | 284,620 89 |
| | $284,620 89 | $284,620 89 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $500,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $625,400.00; No. shares, | 3,254 | | |
| Amount paid in on common, | | $75,000 00 | |
| Total amount paid in as per books of the company, | | | $75,000 00 |
| Amount paid in per mile of road owned by company, | | $1,875 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1889, interest eight per cent, payable May and November), | $640,000 00 |
| Second Mortgage Bonds (due 1890, interest eight per cent, payable May and November), | 70,000 00 |
| Total amount of funded debt, | $710,000 00 |
| Total debt liabilities, | $710,000 00 |

| | |
|---|---|
| Amount of debt liabilities per mile of road [40 miles], . . | $17,750 00 |

## COST OF ROAD AND EQUIPMENT.

### *Cost of Equipment.*

Equipment owned and reported by the M. C. R. R. Co.

### *Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment,—estimated, . . . | $1,150,335 24 |
| Average cost of same per mile, . . . . . | 28,758 38 |
| Proportion of cost of road and equipment for Michigan, | 1,150,335 24 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, . . . . | $25,061 00 | |
| From express and baggage, . . . | 705 79 | |
| From mails, . . . . . | 1,737 72 | |
| Total earnings, passenger department, . . . . | | $27,504 51 |
| Earnings per train mile run [10,400 miles], | $2 64 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, . . . . . | $42,749 67 | |
| Total earnings, freight department, . . . . | | $42,749 67 |
| Earnings per train mile run [40,384 miles], . | $1 06 | |
| Total transportation earnings, . . . . . | | $70,254 18 |
| Earnings per mile of road operated [40 miles], | $1,756.35 | |
| Earnings per train mile run, from all trains earning revenue [50,784 miles], . . | $1 38 | |
| Proportion of earnings for Michigan, . . | $70,254 18 | |
| Total income from all sources, . . . . . | | $70,254 18 |
| Proportion of income for Michigan, . . | 70,254 18 | |

### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, . . . . . | $9,363 09 |
| Renewal of ties, . . . . . | 3,540 29 |

| | |
|---|---|
| Repairs of bridges, including culverts and cattle guards, | $619 19 |
| Repairs of fences, road crossings, and signs, | 2,304 94 |
| Repairs of buildings, | 1,611 59 |
| Total, | $17,439 10 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $2,896 79 |
| Repairs of passenger cars, | 2,310 40 |
| Repairs of freight cars, | |
| Total, | $5,207 19 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $2,630 65 |
| Water-supply, | 1,431 32 |
| Oil and waste, | 614 61 |
| Locomotive service, | 4,306 84 |
| Passenger train service, | 3,624 41 |
| Passenger train supplies, | 83 75 |
| Freight train service, | 2,117 70 |
| Freight train supplies, | 205 00 |
| Mileage of freight cars (debit balance), | 1,129 99 |
| Telegraph expenses (maintenance and operating), | 788 65 |
| Damage and loss of freight and baggage, | 156 09 |
| Damages to property and cattle, | 35 50 |
| Agents and station service, | 4,639 27 |
| Station supplies, | 1,628 57 |
| Total, | $23,392 35 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | See report of M. C. R. R. Co. |
| Salaries of clerks in general offices, | |
| Law expenses, | 146 23 |
| Stationery and printing, | 222 72 |
| Outside agencies and advertising, | 1,417 61 |
| Contingencies, | 1,558 61 |
| Taxes in Michigan, | $1,239 61 |
| Total, | $4,584 78 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $17,439 10 |
| Maintenance of motive power and cars, | 5,207 19 |
| Conducting transportation, | 23,392 35 |
| General expenses, including taxes, | 4,584 78 |
| Total operating expenses and taxes, | $50,623 42 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | | $1,245 59 |
| Operating expenses and taxes per train mile run, for trains earning revenue, [50,784 miles], | | $1 00 |
| Proportion of operating expenses and taxes for Michigan, | | $50,623 42 |
| Per centage of expenses to earnings, | 72.06 | |
| Net earnings per mile of road, | | $490 77 |
| Net earnings per train mile, | | $0 39 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | |
|---|---|
| Construction account, | $992,183 59 |
| Equipment account, | 43,216 41 |
| Total assets, | $1,035,400 00 |

### LIABILITIES.

| | |
|---|---|
| Capital stock, | $325,400 00 |
| Funded debt, | 710,000 00 |
| Total liabilities, | $1,035,400 00 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Kalamazoo to South Haven, January 2d, 1871.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 40 00 | |
| Total length completed, | | 40 00 |
| Total length of road belonging to this company, | | 40 00 |
| Total length of road belonging to this company in Michigan, | 40 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 3 36 |
| Same in Michigan, | 3 36 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 43 36 |
| Same in Michigan, | 43 36 | |
| Gauge of track, 4 feet, 8½ inches, | | |
| Total length of tracks laid with iron rails, weight per yard, 60 lbs., | | 43 36 |
| Total miles of road operated by this company, | | 40 00 |
| Total miles of road operated by this company in Michigan, | 40 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 1; aggregate length, feet, | 131 |
| Wooden trestles, number of, | 6; aggregate length, feet, | 242 |
| Total, | 7 | 373 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 73 |
| Stone, number, | 1 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 103 |
| Number of cattle guards renewed during the year, | 10 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality? Chicago and West Michigan R. R., at Grand Junction.

What railroads cross your road either over or under your grade in this State, and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 45 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | None. |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | 1 |
| Number of crossings of highways under railroad, | None. |
| Number of highway bridges 18 feet above track, | 1 |
| Number of highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions? | Yes. |

*Stations.*

Included in M. C. R. R. report.

*Employés.*

Included in M. C. R. R. report.

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 80 |
| What is the average cost per rod? (Estimated,) | $1 00 |
| The total cost of same? | $25,600 00 |
| How many miles of new fencing have you built during the year? Renewed, | 1,204 |

Give the miles of fence needed on both sides of your track, in Michigan traversed by your road: None.

## REPAIRS AND RENEWALS.

### *Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 8 |
| Average length of sections (miles), | 5 |
| Average number of men in each section gang, | 2 |
| Number of new ties put in whole line during the year, | 10,250 |
| Number of new ties put in track in Michigan, | 10,250 |
| Average number of new ties per mile of road, | 260 |

### *Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 48,313 |

## ROLLING STOCK.

Included in report of M. C. R. R. Co.

## MILEAGE, TRAFFIC, ETC.

### **Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 10,400 |
| Miles run by freight trains during the year, | 40,384 |
| Total mileage of trains earning revenue. | 50,784 |
| Miles run by work trains during the year, | 330 |
| Total train mileage, | 51,114 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 1.8 |
| Average weight of passenger trains, exclusive of passengers, including locomotives,—tons, | 71 |
| Average number of cars in freight trains, | 8 |
| Average weight of freight trains, exclusive of freight, including locomotives,—tons, | 120 |

### *Passenger Traffic.*

Included in report of M. C. R. R. Co.

### *Freight Traffic.*

Included in report of M. C. R. R. Co.

### *Tonnage of Articles Transported.*

Included in report of M. C. R. R. Co.

* a on ce to passenger and freight trains for switching.

## ADDITIONAL QUESTIONS.

*Express Companies.*

Included in report of M. C. R. R. Co.

*Transportation Companies.*

Included in report of M. C. R. R. Co.

*Sleeping Cars,*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Included in report of M. C. R. R. Co.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Included in report of M. C. R. R. Co.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service.

Included in report of M. C. R. R. Co.

*Telegraph.*

Number of miles of telegraph owned by company, - -

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Included in report of M. C. R. R. Co.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

Included in report of M. C. R. R. C.

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

Henry B. Ledyard, General Manager, Daniel A. Waterman, Auditor, of the Michigan Central Railroad Company, Lessee of the Kalamazoo & South Haven Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, HENRY B. LEDYARD,
DANIEL A. WATERMAN.

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.

[L. S.] HENRY RUSSELL,
*Notary Public Wayne County, Mich.*

# ANNUAL REPORT

OF THE

# MICHIGAN AIR LINE RAILROAD COMPANY,

BY MICHIGAN CENTRAL RAILROAD COMPANY, LESSEE,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* J. B. EATON, Jackson, Mich.
*Secretary,* E. BANCKER, Jackson, Mich.
*Treasurer,* M. A. McNAUGHTON, Jackson, Mich.
*General Manager,* H. B. LEDYARD, Detroit, Mich,
*Assistant General Superintendent,* E. C. BROWN, Jackson, Mich.
*Division Superintendent,* C. B. BUSH, Jackson, Mich.
*Superintendent of Telegraph,* C. C. REED, Jackson, Mich.
*Auditor,* D. A. WATERMAN, Detroit, Mich.
*General Passenger Agent,* O. W. RUGGLES, Chicago, Ill.
*General Freight Agent,* J. A. GRIER, Chicago, Ill.
*Attorney* G. V. N. LOTHROP, Detroit, Mich.

## DIRECTORS.

HARRY MELLEN, Romeo, Mich.
RUFUS OSBORN, Tekonsha, Mich.
C. W. HAZE, Pinckney, Mich.
J. H. HUBBARD, Waterloo, Mich.
J. B. EATON, Jackson, Mich.
M. A. McNAUGHTON, Jackson, Mich.
EUGENE PRINGLE, Jackson, Mich.
S. O. KNAPP, Jackson, Mich.
GEO. H. FRENCH, Homer, Mich.
J. C. LEONARD, Union City, Mich.
JOHN F. WOLFF, Centerville, Mich.
R. W. LANDON, Niles, Mich.

Term expires October, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election,—About | 3,000 |
| Number of stockholders in Michigan at same date,—About | 3,000 |
| Amount of full-paid stock held in Michigan at same date,—About | $352,000 00 |

Date of annual meeting of stockholders,—Third Wednesday in October.
Fiscal year of company ends December 31st.
General offices of the company are located at Jackson and Detroit, Mich.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $152,824 94 |
| Total expense, including taxes, | $331,544 57 | |
| Net deficit, | $178,719 63 | |
| Interest on funded debt, | $168,000 00 | |
| Balance for the year,—deficit, | $346,719 63 | |
| Balance (loss) last year, | $1,687,376 19 | |
| Balance forward to next year, | | 2,034,095 82 |
| | $2,034,095 82 | $2,034,095 82 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $400,000 00 |
| Par value of shares, | $50 00 | | |
| Average price received per share, | $50 00 | | |
| Amount issued,—About $344,950, No. of shares,—About | 6,899 | | |
| Amount paid in on common, | | $344,950 00 | |
| Amount paid in on shares not issued (Number),—About | | 38,603 00 | |
| Total amount paid in as per books of the company, | | | 383,553 00 |
| Amount paid in per mile of road owned by company, | | 3,343 38 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| Michigan Central Air Line Mortgage Bonds (due 1890, interest eight per cent, payable January and July), | $1,900,000 00 |
| Michigan Air Line Mortgage Bonds (due 1890, interest eight per cent, payable May and November), | 200,000 00 |
| Total amount of funded debt, | $2,100,000 00 |
| Total debt liabilities, | $2,100,000 00 |
| Amount of debt liabilities per mile of road [114.72 miles], | 18,305 43 |

### COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction,—estimated, | $3,166,759 00 |
| Average cost of construction per mile of road not including sidings, [114.72 miles], | 27,605 99 |
| Proportion of cost of construction for Michigan, | 3,011,623 14 |

*Cost of Equipment.*

Equipment owned and reported by M. C. R. R. Co.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment,—estimated, | $3,166,759 00 |
| Average cost of same per mile, | 27,605 99 |
| Proportion of cost of road and equipment for Michigan, | 3,011,623 14 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $60,750 35 | |
| From express and baggage, | 1,882 36 | |
| From mails, | 6,743 88 | |
| From other sources, passenger department, | 121 00 | |
| Total earnings, passenger department, | | $69,497 59 |
| Earnings per train mile run [130,660 miles], | $0 53 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $83,326 35 | |
| Total earnings, freight department, | | $83,326 35 |
| Earnings per train mile run [77,902 miles], | $1 07 | |
| Total transportation earnings, | | $152,823 94 |

| | | |
|---|---|---|
| Earnings per mile of road operated [114.72 miles], | $1,332 15 | |
| Earnings per train mile run, from all trains earning revenue [208,562 miles], | $0 73 | |
| Proportion of earnings for Michigan, | $145,337 56 | |
| Rents for use of road, stations, etc. | | $1 00 |
| Income from all other sources, | | None. |
| Total income from all sources, | | $152,824 94 |
| Proportion of income for Michigan, | $145,338 25 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | | |
|---|---|---|
| Repairs of roadway and track,—includes track rental, $225.00 | | $44,404 36 |
| Renewal of rails, | | 440 00 |
| Renewal of ties, | | 13,924 93 |
| Repairs of bridges, including culverts and cattle guards, | | 14,747 94 |
| Repairs of fences, road-crossings, and signs, | | 13,191 06 |
| Repairs of buildings, | | 5,165 99 |
| Total, | | $91,874 28 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | | |
|---|---|---|
| Repairs of locomotives, | | $11,657 57 |
| Repairs of passenger cars, | | 9,748 86 |
| Repairs of freight cars, | | |
| Total, | | $21,406 43 |

CLASS 3.—*Conducting Transportation.*

| | | |
|---|---|---|
| Fuel for locomotives, includes fuel for machine shops, etc., $493.47, | | $95,177 17 |
| Water-supply, | | 11,457 66 |
| Oil and waste, | | 3,370 60 |
| Locomotive service, | | 14,402 07 |
| Passenger train service, | | 8,070 31 |
| Passenger train supplies, | | 1,101 48 |
| Freight train service, | | 6,714 10 |
| Freight train supplies, | | 1,045 01 |
| Mileage of freight cars (debit balance), | | 4,680 31 |
| Telegraph expenses (maintenance and operating), | | 8,355 95 |
| Damage and loss of freight and baggage, | | 369 89 |
| Damages to property and cattle, | | 99 50 |
| Personal injuries, | | 32,686 69 |
| Agents and station service, | | 17,347 86 |
| Station supplies, | | 2,067 48 |
| Total, | | $206,946 08 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | See report of M. C. R. R. Co. |
| Salaries of clerks in general offices, | | |
| Law expenses, | | $344 99 |
| Stationery and printing, | | 652 60 |
| Outside agencies and advertising, | | 3,360 86 |
| Contingencies, | | 3,690 54 |
| Taxes in Michigan, | $2,853 83 | |
| Taxes in other States, | 414 96 | 3,268 79 |
| Total, | | $11,317 78 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $91,874 28 |
| Maintenance of motive power and cars, | | 21,406 43 |
| Conducting transportation, | | 206,946 08 |
| General expenses, including taxes, | | 11,317 78 |
| Total operating expenses and taxes, | | $331,544 57 |
| Operating expenses and taxes per mile of road, | $2,890 03 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [208,562 miles], | $1 59 | |
| Proportion of operating expenses and taxes for Michigan, | $315,302 59 | |
| Per centage of expenses to earnings, [216.94] | | |
| Net deficit per mile of road, | $1,557 88 | |
| Net deficit per train mile, | 0 86 | |

ASSETS AND LIABILITIES.

The Michigan Central Railroad Company, Lessee, having no access to the books of its leased line, the "Michigan Air Line Railroad," cannot give the "Assets and Liabilities," or "balance sheet," as herein required.

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Jackson to Homer, summer of 1870.
From Jackson to Three Rivers, autumn of 1870.
From Jackson to Niles, February, 1871.
From Niles to South Bend, February, 1871.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 109 10 | |
| Length completed in Indiana, | 5 62 | |
| Total length completed, | | 114 72 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Total length of road belonging to this company, | | 114 72 |
| Total length of road belonging to this company in Michigan, | 109 10 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 12 80 |
| Same in Michigan, | 11 64 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 127 52 |
| Same in Michigan, | 120 74 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with steel rails, weight per yard 60 lbs., | | 103 60 |
| Total length of track laid with iron rails, weight per yard 60 lbs., | | 23 92 |
| Total miles of road operated by this company, | | 114 72 |
| Total miles of road operated by this company in Michigan, | 109 10 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 37; aggregate length, feet, | 2,190 |
| Iron bridges, number of, | 1; aggregate length, feet, | 30 |
| Wooden trestles, number of, | 25; aggregate length, feet, | 1,727 |
| Total, | 63 | 3,947 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 70 |
| Stone, number, | 15 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 295 |
| Number of cattle guards renewed during the year, | 30 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Fort Wayne & Jackson R. R., at Jackson, Mich.
Lake Shore & Michigan Southern R. R.. at Jackson, Homer, and Three Rivers.
Grand Rapids & Indiana R. R., at Wasepi.
Chicago & Grand Trunk R. R., at Cassopolis.

What railroads cross your road either over or under your grade in this State, and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 124 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | None. |

| | |
|---|---|
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | 3 |
| Number of crossings of highways under railroad, | 4 |
| Number of highway bridges 18 feet above track, | 3 |
| Number highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions, | None. |

*Stations.*

See report of M. C. R. R. Co.

*Employés.*

See report of M. C. R. R. Co.

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 217 00 |
| What is the average cost per rod?—Estimated, | $1 20 |
| The total cost of same? | $83,828 00 |
| How many miles of new fencing have you built during the year? (Renewed), | 76.33 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road, | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 22 |
| Average length of sections,—miles, | 5.2 |
| Average number of men in each section gang, | 3 |
| Number of new ties put in whole line during the year, | 36,405 |
| Number of new ties put in track in Michigan, | 34,625 |
| Average number of new ties per mile of road, | 318 |
| New rails put in track: | |
| Iron [tons ——], | None. |
| Steel [tons 94] miles, | 1 |
| Total miles of track laid with new rails, | 1 |
| Between what points were new rails laid: | |
| Wherever needed. | |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 408,158 |
| Amount of trestle work replaced with earth during the year (linear feet), | 130 |
| Timber culverts replaced with stone—number, | 6 |

| | |
|---|---|
| Timber culverts replaced with timber,—number, 7], timber used (feet B. M.), | 40,500 |
| New bridges built during the year,—number, | None. |

## ROLLING STOCK.

See report of M. C. R. R. Co.

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 130,660 |
| Miles run by freight trains during the year, | 77,902 |
| Total mileage of trains earning revenue, | 208,562 |
| Miles run by work trains during the year, | 4,550 |
| Miles run by switching trains,* | None. |
| Total train mileage, | 213,112 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 1.7 |
| Average weight of passenger trains, exclusive of passengers, including locomotives,—tons, | 69 |
| Average number of cars in freight trains, | 21 |
| Average weight of freight trains, exclusive of freight, including locomotives,—tons, | 256 |

### *Passenger Traffic.*

Included in report of M. C. R. R. Co.

### *Freight Traffic.*

Included in report of M. C. R. R. Co.

### *Tonnage of Articles Transported.*

Included in report of M. C. R. R. Co.

## ADDITIONAL QUESTIONS.

### *Express Companies.*

Included in report of M. C. R. R. Co.

* No allowance to passenger and freight trains for switching.

*Transportation Companies.*

Included report of M. C. R. R. Co.

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Included in report of M. C. R. R. Co.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Included in report of M. C. R. R. Co.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Included in report of M. C. R. R. Co.

*Telegraph.*

Number of miles of telegraph owned by company, - - -

What other company, if any, owns a line of telegraph on your right of way and how many miles does each own?

Included in report of M. C. R. R. Co.

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR.

Included in report of M. C. R. R. Co.

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

Henry B. Ledyard, General Manager, Daniel A. Waterman, Auditor, of the Michigan Central Railroad Company, Lessee of the Michigan Air Line Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed) HENRY B. LEDYARD,
D. A. WATERMAN.

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.

(L. S.) HENRY RUSSELL,
*Notary Public Wayne County, Michigan.*

# ANNUAL REPORT

OF THE

# MICHIGAN MIDLAND & CANADA RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAS. TILLINGHAST, Buffalo, N. Y.
*Secretary*, C. F. COX, New York.
*Treasurer*, C. VANDERBILT, New York.
*General Manager*, W. P. TAYLOR, Buffalo, N. Y.
*Division Superintendent*, E. P. MURRAY, Toledo, Ohio.
*Chief Engineer*, A. R. TREW, St. Thomas, Ont.
*Auditor*, R. I. PELTON, St. Thomas, Ont.
*General Passenger Agent*, W. H. HURLBURT, Buffalo, N. Y.
*General Freight Agent*, W. H. PERRY, Buffalo, N. Y.

## DIRECTORS.

JAS. TILLINGHAST, Buffalo, N. Y.
EDWARD A. WICKS, New York.
CORNELIUS VANDERBILT, New York.
AUGUSTUS SCHELL, New York.
EDWIN D. WORCESTER, New York.
SAMUEL F. BARGER, New York.
WM. L. SCOTT, Erie, Pa.
JOSEPH HARKER, New York.
SIDNEY DILLON, N. Y.

Term expires June 3d, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 29 |
| Number of stockholders in Michigan at same date, - - | 4 |
| Amount of full-paid stock held in Michigan at same date, - | $42,000 00 |

Date of annual meeting of stockholders,—June 4th.
Fiscal year of company ends December 31st.
General offices of the company are located at St. Clair, Mich.

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## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $5,724 50 |
| Total expense, including taxes, | $6,558 21 | |
| Net deficit, | $833 71 | |
| Interest on funded debt, | 22,540 00 | |
| Balance for the year,—deficit, | $23,373 71 | |
| Balance (profit and loss) last year, | 193,203 79 | |
| Construction expenditure, | 348 23 | |
| Balance forward to next year,—deficit, | | 216,925 73 |
| | $216,925 73 | $216,925 73 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $400,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $300,000.00; No. of shares, | 30,000 | | |
| Amount paid in on common, | | $300,000 00 | |
| Total amount paid in as per books of the company, | | | 300,000 00 |
| Amount paid in per mile of road owned by company, 14.68 miles, | | $20,435 96 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due 1890, interest 7 per cent, payable January and July), | | $323,635 00 |
| Total amount of funded debt, | | $323,635 00 |
| Amount received from the same in property, | $323,635 00 | |

FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for operating, | $10,969 52 | |
| Past due coupons, | 168,455 00 | |
| | | $179,424 52 |
| Total debt liabilities, | | $503,059 52 |
| Amount of debt liabilities per mile of road [14.68 miles], | | 34,268 36 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | 503,059 52 |

COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not reported separately), Built by Company.*

Built by contractors for securities. No details.

| | |
|---|---|
| Total expended for construction, | $586,342 02 |
| Average cost of construction per mile of road (not including sidings), [14.68 miles], | 39,941 55 |
| Proportion of cost of construction for Michigan, | 586,342 02 |

*Cost of Equipment.*

No equipment owned.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $586,342 02 |
| Average cost of same per mile, | 39,941 55 |
| Proportion of cost of road and equipment for Michigan, | 586,342 02 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Passenger and freight stations, wood-sheds, and water stations, | $348 23 |
| Total charges to property account during the year, | $348 23 |
| Net addition to property account for the year, | $348 23 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $3,051 55 | |
| From through passengers, | | |
| From express and baggage, | 66 66 | |
| From mails, | 716 49 | |
| Total earnings, passenger department, | | $3,834 70 |

| | | | |
|---|---|---|---|
| Earnings per train mile run [19,930 miles], | $0 19.24 | | |

EARNINGS, FREIGHT.

| | | | |
|---|---|---|---|
| From local traffic, - - - - - - | | | |
| From through traffic, - - - - - | $1,889 80 | | |
| Total earnings freight department, - - - - | | | $1,889 80 |
| Earnings per train mile run [19,930 miles], | $0 09.48 | | |
| Total transportation earnings, - - - - - - | | | $5,724 50 |
| Earnings per mile of road operated [14.68 miles], - - - - - - - - | 392 00 | | |
| Earnings per train mile run, from all trains earning revenue [19,930 miles], - - | $0 28.72 | | |
| Proportion of earnings for Michigan, - - | $5,724 50 | | |
| Total income from all sources, - - - - - - | | | $5,724 50 |
| Proportion of income for Michigan, - - | $5,724 50 | | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, - - - - - - - | $1,048 68 |
| Total, - - - - - - - - - - - | $1,048 68 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, - - - - - - - - | $349 15 |
| Repairs of passenger cars, - - - - - - - - | 6 15 |
| Total, - - - - - - - - - - - | $355 30 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, - - - - - - - - - | $1,800 00 |
| Oil and waste, - - - - - - - - - - | 96 23 |
| Locomotive service, - - - - - - - - - | 1,301 62 |
| Passenger train supplies, - - - - - - - - | 5 10 |
| Freight train service, - - - - - - - - - | 300 00 |
| Mileage of freight cars (debit balance), - - - - | 411 65 |
| Telegraph expenses (maintenance and operating), - - - | 1 50 |
| Agents and station service, - - - - - - - | 600 00 |
| Station supplies, - - - - - - - - - - | 119 93 |
| Total, - - - - - - - - - - - | $4,636 03 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Outside agencies and advertising, | $33 60 |
| Contingencies, | 360 00 |
| Taxes in Michigan, | 124 60 |
| Total, | $518 20 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $1,048 68 |
| Maintenance of motive power and cars, | | 355 30 |
| Conducting transportation, | | 4,636 03 |
| General expenses, including taxes, | | 518 20 |
| Total operating expenses and taxes, | | $6,558 21 |
| Operating expenses and taxes per mile of road, 14.68 miles, | $446 74 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [19,930 miles], | $0 32.9 | |
| Proportion of operating expenses and taxes for Michigan, | $6,558 21 | |
| Per centage of expenses to earnings, [114.56] | | |
| Net deficit per mile of road, | $56 79 | |
| Net deficit per train mile, | $0 04.18 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | | $586,342 02 |
| Profit and loss, | | 216,717 50 |
| Total assets, | | $803,059 52 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $300,000 00 |
| Funded debt, | | 323,635 00 |
| Unfunded debt: | | |
| Interest unpaid, | $168,455 00 | |
| Vouchers and accounts, | 10,969 52 | |
| | | 179,424 52 |
| Total liabilities, | | $803,059 52 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From St. Clair, Mich., to Ridgeway, Mich., December 4th, 1874.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 14 68 | |
| Total length completed, | | 14 68 |
| Total length of road belonging to this company, | | 14 68 |
| Total length of road belonging to this company in Michigan, | 14 68 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 81 |
| Same in Michigan, | 81 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 15 49 |
| Same in Michigan, | 15 49 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs., | | 15 49 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, | 15; aggregate length, feet, | 600 |
| Total, | 15 | 600 |

*Culverts in Michigan.*

Not reported.

*Cattle Guards.*

Not reported.

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 18 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 2 |
| Same in Michigan, | 2 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 12 |
| Same in Michigan, | 12 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 28 |
| What is the average cost per rod? | $0 90 |
| The total cost of same? | $8,064 00 |

| | |
|---|---|
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: - - | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, - - - - | 1 |
| Average length of sections,—miles, - - - - | 14.68 |
| Average number of men in each section gang, - - - | 3 |
| Number of new ties put in whole line during the year, - - | 2,500 |
| Number of new ties put in track in Michigan, - - - | 2,500 |
| Average number of new ties per mile of road, - - - | 170 |

ROLLING STOCK.

None.

MILEAGE, TRAFFIC, ETC.

**Train Mileage.*

| | |
|---|---|
| Miles run by mixed trains during the year, - - - - | 19,930 |
| Total mileage of trains earning revenue, - - - | 19,930 |
| Total train mileage, - - - - - - - - | 19,930 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, - - - - - - - - - - | 1 |
| Average number of cars in freight trains, - - - | 1 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, - | | | |
| Number of local passengers carried, - - | | | |
| Total number of passengers carried, - | 8,554 | | |
| Total passenger mileage, or passengers carried one mile, - - - - - - - - | | 111,202 | |
| Average distance traveled by each passenger, - - | | 13 | |
| Average amount received from each passenger, - - - - | | | $0.40 |
| Highest rate of fare per mile, for any distance, - - - - | | | 0.05 |
| Lowest rate of fare per mile, for any distance, - - - - | | | 0.02 |
| Average rate of fare per mile, for all passengers, - - - - - - - - - - | | | 0.03.11 |

* No allowance to passenger and freight trains for switching.

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | | | |
| Number of tons of local freight carried, | 2,539 | | |
| Total tons of freight carried, | 2,539 | | |
| Total mileage of through freight, | | | |
| Total mileage of local freight, | | 37,272 | |
| Total freight mileage, or tons carried one mile, | | 37,272 | |
| Average ton haul for through freight, | | | |
| Average ton haul for local freight, | | | |
| Average ton haul for all freight, | | 14.68 | |
| Average rate per ton per mile, received for through freight, | | | |
| Average rate per ton per mile, received for local freight, | | | |
| Average rate per ton per mile, received for all freight, | | | 0.00.507 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 110 | 04.33 |
| Flour, | 76 | 02.99 |
| Provisions (beef, pork, lard, etc.), | 75 | 02.95 |
| Animals, | 19 | 00.75 |
| Other agricultural products, | 316 | 12.44 |
| Lumber and forest products, | 1,203 | 47.39 |
| Petroleum, | 27 | 01.07 |
| Other iron and castings, | 6 | 00.24 |
| Stone and brick, | 30 | 01.18 |
| Manufactures,—articles shipped from point of production, | 348 | 13.70 |
| Merchandise and other articles not enumerated above, | 329 | 12.96 |
| Total tons carried, | 2,539 | 100. |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The Canadian Express Co., paying once and one-half first-class freight rates.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

No freight or transportation companies run over this road.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

Nothing.

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

None run.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$716.49 per annum.

*Telegraph.*

Number of miles of telegraph owned by company, . - - - None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

KILLED.

None.

INJURED.

None.

PROVINCE OF ONTARIO, }
COUNTY OF ELGIN, } ss.

R. J. Pelton, Auditor of the Michigan Midland & Canada Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, R. J. PELTON,
*Auditor.*

Subscribed and sworn to before me, this 27th day of April, A. D. 1882.

[L. S.] JNO. TADY,
*Notary Public.*

# ANNUAL REPORT

OF THE

# MINERAL RANGE RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* CHAS. E. HOLLAND, Hancock, Mich.
*Vice President,* R. M. HOAR, Hancock, Mich.
*Secretary and Treasurer,* C. A. WRIGHT, Hancock, Mich.
*General Manager,* CHAS. E. HOLLAND, Hancock, Mich.
*General Passenger and Freight Agent,* W. H. CARR, Hancock, Mich.
*Attorneys,* { CHANDLER & GRANT, and / T. L. CHADBOURNE, } Houghton, Mich.

## DIRECTORS.

CHAS. E. HOLLAND, Hancock, Mich.
PETER RUPPE, Hancock, Mich.
JACOB BAER, Hancock, Mich.
JAS. A. CLOSE, Hancock, Mich.
J. H. CHANDLER, Hancock, Mich.
M. L. CARDELL, Hancock, Mich.
DAVID S. KENDALL, Hancock, Mich.
WM. CONDON, Hancock, Mich.
JAY A. HUBBELL, Houghton, Mich.
R. M. HOAR, Houghton, Mich.
J. R. DEVEREAUX, Houghton, Mich.

Term expires July 11, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 27 |
| Number of stockholders in Michigan at same date, | 26 |
| Amount of full-paid stock held in Michigan at same date, | $115,035 00 |

Date of annual meeting of stockholders,—Second Tuesday in July.
Fiscal year of company ends December 31st.
General offices of the company are located at Hancock, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $117,956 24 |
| Total expense, including taxes, | $81,036 86 | |
| Net income, | | $36,919 38 |
| Interest on funded debt, | 15,912 00 | |
| Interest on unfunded debt, | 4,973 53 | |
| Balance applicable to dividends, | | $16,033 85 |
| *Dividends declared (10 per cent), | 11,635 50 | |
| Balance for the year, | | $4,398 35 |
| Balance (profit and loss) last year, | | 38,137 27 |
| Items not included in above, as follows: | | |
| Balance sinking fund account, closed and credited to profit and loss, | | 481 55 |
| Balance forward to next year, | 43,017 17 | |
| | $43,017 17 | $43,017 17 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $400,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $81,500.00; No. of shares, | 815 | | |
| Amount paid in on common, | | $116,355 00 | |
| Total amount paid in as per books of the Company, | | | $116,355 00 |
| Amount realized in cash, | | $116,355 00 | |
| Amount paid in per mile of road owned by company, | | 9,308 40 | |

* Dividend paid in notes, payable on or before July 20, 1885, with interest at 8 per cent, payable annually.

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due 1888, interest 8 per cent, payable June and December), | | $198,900 00 |
| Total amount of funded debt, | | $198,900 00 |
| Amount received from the same in cash, | $159,670 00 | |

### FLOATING DEBT.

| | | |
|---|---|---|
| *Incurred for construction, | $59,358 10 | |
| *Incurred for equipment, | 5,055 60 | |
| Other debts,—current credit balances, etc., | 14,612 76 | |
| Total debt liabilities, | | $277,926 46 |
| Amount of debt liabilities per mile of road [12.5 miles], | | 22,234 11 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | 252,903 23 |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not reported separately), Built by Company*

| | |
|---|---|
| Grading and masonry, | $76,198 90 |
| Bridging, | 7,206 74 |
| Superstructure (including rails), | 113,964 69 |
| Land, land damages and fences, | 37,006 41 |
| Passenger and freight stations, woodsheds, etc., | 8,150 95 |
| Engine houses, car sheds and turn-tables, | 10,216 38 |
| Machine shops, | 5,251 67 |
| Interest paid during construction, discount, etc., | 7,029 72 |
| Engineering, agencies, salaries, and other expenses during construction, | 21,545 18 |
| All other items charged to construction not enumerated above, | 41,668 22 |
| Total expended for construction, | $328,238 86 |
| Average cost of construction per mile of road (not including sidings), [12.5 miles], | $22,259 11 |
| Proportion of cost of construction for Michigan, | All. |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $32,469 39 |
| Snow-plows attached to locomotives, | 1,152 79 |
| Passenger, mail, and baggage cars, | 13,289 40 |

* These amounts are given the same as in last year's report without reference to the changes which have been made in the character of the floating debt during 1881.

| | |
|---|---|
| Freight and other cars, | $16,916 64 |
| Machinery and tools, | 6,227 40 |
| Total for equipment, | $70,055 62 |
| Average cost of equipment per mile of road operated by Company [12.5 miles], | $5,604 45 |
| Proportion of cost of equipment for Michigan, | All. |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $398,294 48 |
| Average cost of same per mile, | 31,863 56 |
| Proportion of cost of road and equipment for Michigan, | All. |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| New snow plows, | $359 44 |
| Machine-shops, machinery and tools, | 604 53 |
| Total charges to property account during the year, | $963 97 |
| Property sold and credited property account during year (specifying same): | |
| Credited locomotives and charged expense, account depreciation, | 2,800 00 |
| Credited stations—heating apparatus sold, | 52 46 |
| Net credit to property account for the year, | $1,888 49 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $23,987 11 | |
| From express and baggage, | 419 12 | |
| From mails, | 408 00 | |
| Total earnings, passenger department, | | $24,814 23 |
| Earnings per train mile run [26,250 miles], | $0 94 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $93,142 01 | |
| Total earnings, freight department, | | $93,142 01 |
| Earnings per train mile run [22,472 miles], | $4 14 | |
| Total transportation earnings, | | $117,956 24 |

| | | |
|---|---|---|
| Earnings per mile of road operated [12.5 miles], | $9,436 50 | |
| Earnings per train mile run, from all trains earning revenue [48,722 miles], | $2 42 | |
| Proportion of earnings for Michigan, | $117,956 24 | |
| Total income from all sources for year 1881, | | $117,956 24 |
| Proportion of income for Michigan, | $117,956 24 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $12,643 76 |
| Renewal of rails, | 12,359 36 |
| Renewal of ties, | 2,605 22 |
| Repairs of bridges, including culverts and cattle guards, | 439 61 |
| Repairs of buildings, | 1,886 70 |
| Total, | $29,934 65 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| *Repairs of locomotives, | $8,311 68 |
| Repairs of passenger cars, | 833 25 |
| Repairs of freight cars, | 1,085 09 |
| Total, | $10,230 02 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $5,521 23 |
| Oil and waste, | 481 27 |
| Locomotive service, | 4,701 05 |
| Passenger train service, | 1,505 00 |
| Passenger train supplies, | 138 27 |
| Freight train supplies, | 2,128 40 |
| Freight train service, | 23 97 |
| Cost of maintenance 40 rock cars, owned by mining company, but operated and maintained by this company, | 3,526 70 |
| Telegraph expenses (maintenance and operating),—Rental, | 300 00 |
| Damage and loss of freight and baggage, | 280 96 |
| Agents and station service, | 8,385 21 |
| Station supplies, | 860 77 |
| Total, | $27,852 83 |

* Includes $2,800 charged off, account depreciation, as shown in item 16, page —.

### CLASS 4.—*General Expenses.*

| | |
|---|---|
| *Salaries of the general officers of the company, | $8,000 00 |
| Law expenses, | 500 00 |
| Insurance, | 783 12 |
| Stationery and printing, | 559 16 |
| Contingencies, | 517 22 |
| Taxes in Michigan, | 2,659 86 |
| Total, | $13,019 36 |

### RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $29,934 65 |
| Maintenance of motive power and cars, | 10,230 02 |
| Conducting transportation, | 27,852 83 |
| General expenses, including taxes, | 13,019 36 |
| Total operating expenses and taxes, | $81,036 86 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 12.5 miles, | $6,482 95 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [48,722 miles], | $1 66 | |
| Proportion of operating expenses and taxes for Michigan, | $81,036 86 | |
| Per centage of expenses to earnings, | 68 | |
| Net earnings per mile of road, | $2,953 55 | |
| Net earnings per train mile, | $0 76 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $328,238 36 |
| Equipment account, | | 70,055 62 |
| Cash items: | | |
| Cash, | $2,804 49 | |
| Bills receivable, | 3,155 97 | |
| Due from agents and companies, | 3,789 23 | |
| | | 9,749 69 |
| Other assets: | | |
| Materials and supplies, | $11,176 43 | |
| Debit balances, | 18,078 03 | |
| | | 29,254 46 |
| Total assets, | | $437,298 63 |

### LIABILITIES.

| | |
|---|---|
| Capital stock, | $116,355 00 |
| Funded debt, | 198,900 00 |

* A portion of salaries of general officers is charged in agents and station service as service was rendered in that department.

| | | |
|---|---|---|
| Unfunded debt: | | |
| Notes payable, | $60,475 77 | |
| Vouchers and accounts, | 18,550 69 | |
| | | $79,026 46 |
| Profit and loss or income accounts, | | 43,017 17 |
| Total liabilities, | | $437,298 63 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Hancock to Highway, September 8, 1873.
From Highway to Calumet, October 11, 1873.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, Hancock to Calumet, | 12 50 | |
| Total length completed, | | 12 50 |
| Total length of road belonging to this company, | | 12 50 |
| Total length of road belonging to this company in Michigan, | 12 50 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 1 83 |
| Same in Michigan, | 1 83 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 14 33 |
| Same in Michigan, | 14 33 | |
| Gauge of track, 3 feet. | | |
| Total length of track laid with steel rails, weight per yard, 50 lbs., | 1 90 | |
| Total length of tracks laid with iron rails, weight per yard, 35 lbs. | 12 43 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, 3; aggregate length, feet, | | 147 |
| Wooden trestles, number of, 3; aggregate length, feet, | | 183 |
| Total, | 6 | 330 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 5 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 5 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Hecla & Torch Lake R. R., at Calumet.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 8 |
| Number of crossings of highways at grade in this State without signs, | 2 |
| Number of crossings of highways under railroad, | 1 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 2 |
| Same in Michigan, | 2 |

*Employés.*

| | |
|---|---|
| *Number of persons regularly employed on all roads operated by company, including officials, | 47 |
| Same in Michigan, | 47 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | None |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Houghton county, | 25 |
| Total miles, | 25 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 3 |
| Average length of sections, miles, | 4 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 13,078 |
| Number of new ties put in track in Michigan, | 13,078 |
| Average number of new ties per mile of road, | 1,057 |
| New rails put in track: | |
| Iron [tons 74] miles, | 1.35 |
| Steel [tons 99] miles, | 1.26 |
| Total miles of track laid with new rails, | 2.61 |

Between what points were new rails laid:
Iron rails between Franklin and Boston.
Steel rails between Hancock and Swedetown.

*Bridges and Culverts.*

New bridges built during year,—number, One; and one partially rebuilt.

* As number of employes change during the different seasons of the year, the above is an estimate of the minimum number employed during the whole year.

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Hancock | Trestle | Wood | | 86 |
| Boston | Trestle | Wood | | 59 |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 1 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 3 |
| Number of passenger cars—8-wheel, | 2 |
| Number of smoking and baggage cars combined, | 2 |
| Number of box freight cars, | 13 |
| Number of platform cars, | 22 |
| Number of rock cars, owned by mining company but maintained by this company, | 40 |
| Other cars as follows: | |
| Hand cars, | 4 |
| Number of locomotives equipped with train-brake: | |
| All locomotives equipped with steam brakes, applied to drivers and under control of engineer. | |
| Number of passenger train cars with Miller platform and buffer, | 4 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by mixed trains during the year, | 26,250 |
| Miles run by freight trains during the year, | 22,472 |
| Total mileage of trains earning revenue, | 48,722 |
| Miles run by work trains during the year, | 1,681 |
| Total train mileage, | 50,403 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in mixed trains, including baggage cars, | 3 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 43 |
| Average number of cars in freight trains, | 18 |
| Average weight of freight trains, exclusive of freight,—tons, | 138 |

*Passenger Traffic.*

| | | | |
|---|---|---|---|
| Number of local passengers carried, | 45,449 | | |
| Total number of passengers carried, | 45,449 | | |
| Total passenger mileage, or passengers carried one mile, | | 495,516 | |
| Average distance traveled by each passenger, | | 10.90 | |
| Average amount received from each passenger, | | | $0.52.77 |
| Highest rate of fare per mile, for any distance, | | | 0.05 |
| Lowest rate of fare per mile, for any distance, | | | 0.02.50 |
| Average rate of fare per mile, for local passengers, | | | 0.04.84 |
| Average rate of fare per mile, for all passengers, | | | 0.04.84 |

*Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of local freight carried, | 188,047 | | |
| Total tons of freight carried, | 188,047 | | |
| Total mileage of local freight, | | 2,101,900 | |
| Total freight mileage, or tons carried one mile, | | 2,101,900 | |
| Average ton haul for local freight, | | 11.17 | |
| Average ton haul for all freight, | | 11.17 | |
| Average amount received for each ton haul, | | | $0.49.53 |
| Average rate per ton per mile, received for local freight, | | | 0.04.43 |
| Average rate per ton per mile, received for all freight, | | | 0.04.43 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 1,083 | .57 |
| Flour, | 1,219 | .65 |
| Provisions (beef, pork, lard, etc.), | 1,728 | .92 |
| Animals, | 279 | .14 |
| Other agricultural products, | 2,209 | 1.18 |
| Lumber and forest products, | 2,200 | 1.18 |
| Coal, | 723 | .38 |
| Copper, | 11,010 | 5.86 |
| Copper rock, | 161,447 | 85.85 |
| Manufactures,—articles shipped from point of production, | 815 | .43 |
| Merchandise and other articles not enumerated above, | 5,334 | 2.84 |
| Total tons carried, | 188,047 | 100.00 |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company runs on this road, paying 20c. per hundred pounds on freights. Its freight is in charge of messengers who bring it to and take it from depots.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Nothing.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

None.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

The mail is carried for contractor at $34 per month.

### *Telegraph.*

Number of miles of telegraph owned by company, - - None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

The Lake Superior Mineral Range Telegraph Company owns 12.5 miles on right of way.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

None.

### INJURED.

August 2. Mattis Mattison, section-hand, gravel train, fingers crushed between drawheads of flat cars while in act of passing his handkerchief to man on next car to one he was sitting on. Man all right now.

## TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | | |
| Derailments | | | | | | |
| Falling from trains | | | | | | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | 1 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | | | | | 1 | |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | — |
| Same for Michigan, | — |
| Number of persons injured during the year on the entire line, | 1 |
| Same for Michigan, | 1 |
| Number of casualties purely accidental in Michigan, | — |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 1 |
| Trespassers and tramps killed or injured in Michigan, | — |
| Suicides in Michigan, | — |

STATE OF MICHIGAN, }
COUNTY OF HOUGHTON, } ss.

Chas. E. Holland, President, and C. A. Wright, Secretary, of the Mineral Range Railroad, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), CHAS. E. HOLLAND, *President.*
C. A. WRIGHT, *Secretary.*

Subscribed and sworn to before me, this 7th day of March, A. D. 1882.
[L. S.] W. B. ANDERSON,
*Notary Public.*

# ANNUAL REPORT

OF THE

# PAW PAW RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, F. B. ADAMS, Lawton, Mich.
*Vice President*, G. W. LONGWELL, Paw Paw, Mich.
*Secretary*, HENRY FORD, Lawton, Mich.
*Treasurer*, F. B. ADAMS, Lawton, Mich.
*General Superintendent*, JOHN IHLING, Lawton, Mich.

## DIRECTORS.

F. B. ADAMS, Lawton, Mich.
HENRY FORD, Lawton, Mich.
JOHN IHLING, Lawton, Mich.
G. W. LONGWELL, Paw Paw, Mich.
C. A. HARRISON, Paw Paw, Mich.
E. O. BRIGGS, Paw Paw, Mich.
EDWIN MARTIN, Paw Paw, Mich.

Term expires January 10, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 8 |
| Number of stockholders in Michigan at same date, - - | 8 |
| Amount of full-paid stock held in Michigan at same date, - | $75,000 00 |

Date of annual meeting of stockholders,—Second Tuesday in January.
Fiscal year of company ends December 31.
General offices of the company are located at Lawton, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $11,514 52 |
| Total expense, including taxes, | $7,591 81 | |
| Net income, | | $3,922 71 |
| Interest on funded debt, | 300 00 | |
| Rentals, | 3,000 00 | |
| Balance for the year, | | $622 71 |
| Balance (profit and loss) last year, | | 3,925 24 |
| Balance forward to next year, | 4,547 95 | |
| | $4,547 95 | $4,547 95 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $75,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $40 00 | | |
| Amount paid in on common, | | $75,000 00 | |
| Total amount paid in as per books of the company, | | | $75,000 00 |
| Amount realized in cash, | | $30,000 00 | |
| Amount in property, | | 45,000 00 | |
| Amount paid in per mile of road owned by company, | | $18,750 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due 1890, interest ten per cent, payable January and July), | | $3,000 00 |
| Total amount of funded debt, | | $3,000 00 |
| Amount received from the same in cash, | $3,000 00 | |
| Total debt liabilities, | | $3,000 00 |
| Amount of debt liabilities per mile of road [4 miles], | 750 00 | |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $78,000 00 |

| | |
|---|---|
| Average cost of construction per mile of road (not including sidings) [4 miles], | $19,500 00 |
| Proportion of cost of construction for Michigan, | 78,000 00 |

*Cost of Equipment.*

| | |
|---|---|
| Machinery and tools,—transfer truck, | $1,815 00 |
| Total for equipment, | $1,815 00. |
| Average cost of equipment per mile of road operated by company [4 miles], | 453 75 |
| Proportion of cost of equipment for Michigan, | 1,815 00 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $79,815 00 |
| Average cost of same per mile, | 19,953 75 |
| Proportion of cost of road and equipment for Michigan, | 79,815 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, From through passengers, | $4,266 71 | |
| From express and baggage, | 914 11 | |
| From mails, | 400 00 | |
| Total earnings, passenger department, | | $5,580 82 |
| Earnings per train mile run [10,016 miles], | $0 56 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, From through traffic, | $5,933 70 | |
| Total earnings, freight department, | | $5,933 70 |
| Earnings per train mile run [10,016 miles], | $0 59 | |
| Total transportation earnings, | | $11,514 52 |
| Earnings per mile of road operated [4 miles], | $2,878.03 | |
| Earnings per train mile run, from all trains earning revenue [10,016 miles], | $1 15 | |
| Proportion of earnings for Michigan, | $11,514 52 | |
| Total income from all sources, | | $11,514 52 |
| Proportion of income for Michigan, | $11,514 52 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $840 89 |
| Renewal of ties, | 153 36 |
| Repairs of bridges, including culverts and cattle guards, | 49 60 |
| Repairs of buildings, | 155 50 |
| Total, | $1,209 35 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $36 86 |
| Repairs of freight cars, | 146 35 |
| Total, | $183 21 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $211 19 |
| Oil and waste, | 114 88 |
| Locomotive service, | 609 72 |
| Passenger train service, | 207 64 |
| Passenger train supplies,—mixed, | 3 81 |
| Shoveling snow, turn-table, etc., | 140 05 |
| Damage and loss of freight and baggage, | 7 20 |
| Agents and station service, | 1,447 42 |
| Station supplies, | 51 82 |
| Total, | $2,793 53 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $1,800 00 |
| Salaries of clerks in general offices, | 1,200 00 |
| Stationery and printing, | 10 73 |
| Contingencies, | 164 70 |
| Taxes in Michigan, | 230 29 |
| Total, | $3,405 72 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $1,209 35 |
| Maintenance of motive power and cars, | 183 21 |
| Conducting transportation, | 2,793 53 |
| General expenses, including taxes, | 3,405 72 |
| Total operating expenses and taxes, | $7,591 81 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 4 miles, | $1,897 95 | |
| Operating expenses and taxes per train mile run, for trains earning revenue, [10,016 miles], | $0 75.69 | |
| Proportion of operating expenses and taxes for Michigan, | $7,591 81 | |
| Per centage of expenses to earnings, | 66 | |
| Net earnings per mile of road, | 980 68 | |
| Net earnings per train mile, | 0 39 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $78,000 00 |
| Equipment account, | | 1,815 00 |
| Cash items: | | |
| Cash, | $673 48 | |
| Bills receivable, | 887 66 | |
| | | 1,561 14 |
| Other assets: | | |
| Materials and supplies, | | 1,402 10 |
| Total assets, | | $82,778 24 |

### LIABILITIES.

| | |
|---|---|
| Capital stock, | $75,000 00 |
| Funded debt, | 3,000 00 |
| Unfunded debt: | |
| Taxes, 1881, | 230 29 |
| Profit and loss, or income accounts, | 4,547 95 |
| Total liabilities, | $82,778 24 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Lawton to Paw Paw, 1868.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 4 00 | |
| Total length completed, | | 4 00 |
| Total length of road belonging to this company, | | 4 00 |
| Total length of road belonging to this company in Michigan, | 4 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 25 |
| Same in Michigan, | 25 | |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Aggregate length of tracks belonging to this company computed as single track, | | 4 25 |
| Same in Michigan, | 4 25 | |
| Gauge of track, 3 feet. | | |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs., | | 4 25 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 1; aggregate length, feet, | 110 |
| Total, | 1 | 110 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 2 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 6 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 5 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 2 |
| Same in Michigan, | 2 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 12 |
| Same in Michigan, | 12 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 8 |
| What is the average cost per rod? | $1 00 |
| The total cost of same? | $2,560 00 |

Give the miles of fence needed on both sides of your track, in Michigan traversed by your road: None.

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 1 |
| Average length of sections (miles), | 4 |
| Average number of men in each section gang, | 2 |

| | |
|---|---|
| Number of new ties put in whole line during the year, | 544 |
| Number of new ties put in track in Michigan, | 544 |
| Average number of new ties per mile of road, | 136 |

## ROLLING STOCK.

Furnished by Toledo & South Haven R. R.

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | |
| Miles run by freight trains during the year, | 10,016 |
| Total mileage of trains earning revenue. | 10,016 |
| Total train mileage, | 10,016 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | | | |
| Number of local passengers carried, | 17,066 | | |
| Total number of passengers carried, | 17,066 | | |
| Total passenger mileage, or passengers carried one mile, | | 68,264 | |
| Average distance traveled by each passenger, | | 4 | |
| Average amount received from each passenger, | | | 0.25 |
| Highest rate of fare per mile, for any distance, | | | 0.06.25 |
| Lowest rate of fare per mile, for any distance, | | | 0.06.25 |
| Average rate of fare per mile, for all passengers, | | | 0.06.25 |

### *Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of through freight carried, | | | |
| Number of tons of local freight carried, | 7,031 | | |
| Total tons of freight carried, | 7,031 | | |
| Total freight mileage, or tons carried one mile, | | 28,124 | |
| Average ton haul for through freight, | | 4 | |
| Average ton haul for all freight, | | 4 | |
| Average amount received for each ton haul, | | | 0.84.39 |
| Average rate per ton per mile, received for all freight, | | | 0.21.09 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 185 | 2.63 |
| Flour, | 1,476 | 21.00 |
| Provisions (beef, pork, lard, etc.), | 8 | .11 |
| Animals, | 203 | 2.88 |
| Other agricultural products, | 458 | 6.52 |
| Lumber and forest products, | 2,366 | 33.66 |
| Coal, | 82 | 1.16 |
| Plaster, | 68 | .96 |
| Salt, | 91 | 1.30 |
| Petroleum, | 41 | 58 |
| Other iron and castings, | 164 | 2.34 |
| Stone and brick, | 257 | 3.65 |
| Manufactures,—articles shipped from point of production, | 892 | 12.69 |
| Merchandise and other articles not enumerated above, | 740 | 10.52 |
| Total tons carried, | 7,031 | 100.00 |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American, 15c. per 100 lbs.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

KILLED.

None.

INJURED.

None.

STATE OF MICHIGAN, }
COUNTY OF VAN BUREN, } ss.

John Ihling, Lessee of the Paw Paw Railroad, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, J. IHLING,

Subscribed and sworn to before me, this 17th day of May, A. D. 1882.

[L. S.] GEO. W. LAWTON,
*Notary Public.*

# ANNUAL REPORT

OF THE

# PORT HURON & NORTHWESTERN RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* HENRY HOWARD, Port Huron, Mich.
*Vice Presidents,* JNO. P. SANBORN and C. A. WARD, Port Huron, Mich.
*Secretary and Treasurer,* FRED. L. WELLS, Port Huron, Mich.
*General Manager,* HENRY McMORRAN, Port Huron, Mich.
*General Superintendent,* J. R. WADSWORTH, Port Huron, Mich.
*Chief Engineer,* A. L. REED, Port Huron, Mich.
*General Passenger Agent,* C. C. JENKINS, Port Huron, Mich.

## DIRECTORS.

JAMES BEARD, Port Huron, Mich.
S. L. BALLENTINE, Port Huron, Mich.
C. F. HARRINGTON, Port Huron, Mich.
E. B. HARRINGTON, Port Huron, Mich.
HENRY HOWARD, Port Huron, Mich.
HENRY McMORRAN, Port Huron, Mich.
JNO. P. SANBORN, Port Huron, Mich.
P. B. SANBORN, Port Huron, Mich.
PETER SANBORN, Port Huron, Mich.
C. A. WARD, Port Huron, Mich.
F. L. WELLS, Port Huron, Mich.

Term expires March 1st, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 11 |
| Number of stockholders in Michigan at same date, - - | 11 |
| Amount of full-paid stock held in Michigan at same date, - | All. |

Date of annual meeting of stockholders,—First Wednesday in March.
Fiscal year of company ends December 31st.
General offices of the company are located at Port Huron, Mich.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $135,495 41 |
| Total expense, including taxes, | $66,585 10 | |
| Net income, | | $68,910 31 |
| Interest on funded debt, | $42,291 67 | |
| Balance for the year, | | $26,618 64 |
| Balance (profit and loss) last year, | | $15,465 23 |
| Balance forward to next year, | 42,083 87 | |
| | $42,083 87 | $42,083 87 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $604,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $520,000.00; No. of shares, | 5,200 | | |
| Amount paid in on common, | | $520,000 00 | |
| Amount paid in on shares not issued (Number 840), | | 84,000 00 | |
| Total amount paid in as per books of the company, | | | $604,000 00 |
| Amount paid in per mile of road owned by company, | | $4,000 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due October 1st, 1899, interest seven per cent, payable April 1st, October 1st, | $755,000 00 |
| Total amount of funded debt, | $755,000 00 |

FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for construction, | $94,771 84 | |
| Incurred for equipment, | 186,000 00 | |
| Incurred for real estate, other than right of way and depot grounds, | 20,000 00 | |
| Other debts,—current credit balances, etc., | 406,614 69 | |
| | | $707,386 53 |
| Total debt liabilities, | | $1,462,386 53 |
| Amount of debt liabilities per mile of road [151 miles], | $9,684 68 | |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | $1,323,832 99 |

COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Grading and masonry, Bridging, Superstructure, including rails, | $1,226,420 43 |
| Land, land damages, and fences, | 440,532 20 |
| Passenger and freight stations, wood-sheds and water stations, | 42,722 66 |
| Engine-houses, car-sheds. and turn-tables, | 4,250 20 |
| Machine shops, | 1,702 13 |
| All other items charged to construction not enumerated above, | 6,545 18 |
| Total expended for construction, | $1,722,172 80 |
| *Average cost of construction per mile of road not including sidings [151 miles], | 11,405 12 |
| Proportion of cost of construction for Michigan, | 1,722,172 80 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $81,322 24 |
| Snow-plows, | 65 05 |
| Passenger, mail, and baggage cars, | 67,386 66 |
| Freight and other cars, | 107,082 79 |
| Machinery and tools, furniture and fixtures, | 5,099 82 |
| Total for equipment, | $260,956 56 |
| Average cost of equipment per mile of road operated by Company [151 miles], | 1,728 19 |
| Proportion of cost of equipment for Michigan, | 260,956 56 |

* Road not completed.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $1,983,129 36 |
| Average cost of same per mile, | 13,133 31 |
| Proportion of cost of road and equipment for Michigan, | 1,983,129 36 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension or alteration of road, | $535,075 88 |
| Land, | 294,495 60 |
| Passenger and freight stations, wood-sheds, and water stations, | 32,594 42 |
| Engine-houses, car-sheds, and turn-tables, | 3,058 58 |
| New locomotives, | 62,504 23 |
| New passenger cars, | 44,492 51 |
| New mail and baggage cars, | 9,976 73 |
| New freight cars, | 86,385 86 |
| Machine-shops, machinery and tools, | 2,378 02 |
| New fences, | 15,634 72 |
| Any other expenditures charged to property account (specifying the same): | |
| New telegraph, | 4,048 81 |
| New dock, | 223 02 |
| Hand and rubble cars, | 337 12 |
| Furniture and fixtures, | 1,764 38 |
| *Real estate, other than right of way and depot grounds, | 1,000 00 |
| Total charges to property account during the year, | $1,093,969 88 |
| Property sold and credited property account during year (specifying same): | |
| Real estate other than right of way and depot grounds, | 6,913 26 |
| Net addition to property account for the year, | $1,087,056 62 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $62,486 42 | |
| From express and baggage, | 4,288 07 | |
| From mails, | 3,917 82 | |
| From other sources, passenger department, | 715 03 | |
| Total earnings, passenger department, | | $71,407 34 |
| Earnings per train mile run [70,986 miles], | $1 00.59 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $63,286 63 | |
| Total earnings, freight department, | | $63,286 63 |

Omitted from page —.

| | | |
|---|---|---|
| Earnings per train mile run [62,811 miles], | $1 00.75 | |
| Total transportation earnings, | | $134,693 97 |
| Earnings per mile of road operated [average 119 miles], | $1,131 88 | |
| Earnings per train mile run, from all trains earning revenue [133,797 miles], | $1 00.67 | |
| Proportion of earnings for Michigan, | $134,693 97 | |
| Income from all other sources: | | |
| Telegraph, | | 801 44 |
| Total income from all sources, | | $135,495 41 |
| Proportion of income for Michigan, | $135,495 41 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $17,028 89 |
| Repairs of bridges, including culverts and cattle guards, | 11 98 |
| Total, | $17,040 87 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $1,516 45 |
| Repairs of passenger cars, | 694 80 |
| Repairs of freight cars, | 2,084 41 |
| Total, | $4,295 66 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $9,633 38 |
| Water-supply, | 205 06 |
| Oil and waste, | 956 82 |
| Locomotive service, | 7,574 50 |
| Passenger train service, | 3,576 21 |
| Passenger train supplies, | 394 62 |
| Freight train service, | 4,768 26 |
| Freight train supplies, | 526 18 |
| Telegraph expenses (maintenance and operating), | 782 58 |
| Damage and loss of freight and baggage, | 25 17 |
| Damages to property and cattle, | 620 41 |
| Personal injuries, | 7 30 |
| Agents and station service, | 7,693 60 |
| Station supplies, | 211 83 |
| Total, | $36,975 62 |

### CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $2,691 67 |
| Salaries of clerks in general offices, | 574 75 |
| Insurance, | 334 45 |
| Stationery and printing, | 892 26 |
| Outside agencies and advertising, | 102 00 |
| Contingencies, | 983 95 |
| Taxes in Michigan, | $2,693 87 |
| Total, | $8,272 95 |

#### RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $17,040 87 |
| Maintenance of motive power and cars, | 4,295 66 |
| Conducting transportation, | 36,975 62 |
| General expenses, including taxes, | 8,272 95 |
| Total operating expenses and taxes, | $66,585 10 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 119 average miles, | $559 54 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [113,797 miles], | $0 49.7 | |
| Proportion of operating expenses and taxes for Michigan, | | $66,585 10 |
| Per centage of expenses to earnings, 49.14 | | |
| Net earnings per mile of road, 119 average miles, | $579 07.8 | |
| Net earnings per train mile, | $0 51.5 | |

## ASSETS AND LIABILITIES.

#### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $1,722,172 80 |
| Equipment account, | | 260,956 56 |
| Other investments (specifying same): | | |
| Real estate other than right of way and depot grounds, | | 22,040 58 |
| Cash items: | | |
| Cash, | $6,904 11 | |
| Bills receivable, | 51,311 62 | |
| | | 58,215 73 |
| Other assets: | | |
| Materials and supplies, | 5,368 41 | |
| Debit balances, | 52,928 82 | |
| | | 58,297 23 |
| Total assets, | | $2,121,682 90 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $604,000 00 |
| Funded debt, | | 755,000 00 |
| Unfunded debt: | | |
| Interest unpaid,—not due, | $13,212 50 | |
| Notes payable, | 114,771 84 | |
| Vouchers and accounts, | 25,724 69 | |
| Other liabilities, | 566,890 00 | |
| | | 720,599 03 |
| Profit and loss, or income accounts, | | 42,083 87 |
| Total liabilities, | | $2,121,682 90 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Port Huron to Croswell, May 12, 1879.
From Croswell to Carsonville, March 8, 1880.
From Carsonville to Deckerville, July 5, 1880.
From Deckerville to Minden, August 9, 1880.
From Minden to Sand Beach, September 13, 1880.
From Saginaw Junction to Marlette, January 17, 1881.
From Marlette to Mayville, September 21, 1881.
From Mayville to Vassar, December 1, 1881.
*From Vassar to East Saginaw, December 31, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 151 00 | |
| Total length completed, | | 151 00 |
| Total length of road belonging to this company, | | 151 00 |
| Total length of road belonging to this company in Michigan, | 151 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 8 14 |
| Same in Michigan, | 8 14 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 159 14 |
| Same in Michigan, | 159 14 | |
| Gauge of track 3 feet. | | |
| Total length of track laid with iron rails, weight per yard 30 lbs., | | 159 14 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 20; aggregate length, feet, | 2,912 |
| Iron bridges, number of, | 1; aggregate length, feet, | 140 |
| Total, | 21 | 3,052 |

* Track laid.

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 410 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 189 |
| Number of cattle guards renewed during the year, | 5 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Grand Trunk R. R., at Port Huron.
Detroit & Bay City R. R., at Vassar.
Detroit & Bay City, (Saginaw Division), R. R., at South Saginaw.

What railroads cross your road either over or under your grade in this State, and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 186 |
| Number of crossings of highways at grade in this State without signs, | 49 |
| Number of crossings of highways over railroad, | None. |
| Number of crossings of highways under railroad, | None. |
| Number of highway bridges 18 feet above track, | None. |
| Number highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions, | None. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 38 |
| Same in Michigan, | 38 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 202 |
| Same in Michigan, | 202 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 170 82 |
| What is the average cost per rod? | $0 62.5 |
| The total cost of same? | $34,194 72 |
| How many miles of new fencing have you built during the year? | 112.82 |

Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road:

| | |
|---|---|
| In St. Clair county, | 3.18 |
| In Sanilac county, | 20.45 |
| In Huron county, | 5.62 |

| | |
|---|---|
| In Lapeer county, | 16.90 |
| In Tuscola county, | 47.23 |
| In Saginaw county, | 20.00 |
| Total miles, | 113.38 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, (119 miles operated), | 17 |
| Average length of sections,—miles, | 6 |
| Average number of men in each section gang, | 4 |

*Bridges and Culverts.*

| | |
|---|---|
| Timber culverts replaced with timber,—[number, 6], timber used (feet B. M.), | 5,531 |
| New bridges built during the year,—number, | 12 |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. | |
|---|---|---|---|---|---|
| Port Huron "City Bridge" | Iron draw | Iron | June | 140 | |
| Black River "High Bridge" | Truss and trestle | Wood | Aug. to Nov., '80 | 798 | Built in 1880, but not reported. |
| Plum Creek | Pile | Wood | November, 1880 | 148 | |
| Silver Creek | Pile | Wood | November, 1880 | 78 | |
| Mill Creek, No. 1 | Pile | Wood | November, 1880 | 106 | |
| Mill Creek, No. 2 | Pile | Wood | December, 1880 | 64 | |
| Nettle | Pile | Wood | December, 1880 | 116 | |
| Wright's | Mud sill | Wood | August | 70 | |
| Mayville | Mud sill | Wood | August | 66 | |
| Watson | Mud sill | Wood | September | 66 | |
| Evergreen | Mud sill | Wood | October | 66 | |
| Cass River | Truss & pile tr's'le | Wood | November | 322 | |
| | | | | 2,040 | |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 3 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 8 |
| Number of passenger cars—8-wheel, | 16 |
| Number of express, mail, and baggage cars, | 6 |
| Number of box freight cars, | 170 |
| Number of stock cars, | 11 |
| Number of platform cars, | 80 |
| Number of conductors' way cars, | 1 |
| Number of locomotives equipped with train-brake, | 11 |
| Number of cars used in passenger trains equipped with train-brake, | 22 |
| What kind of train-brake is in use on your road? | Westinghouse. |
| Number of passenger train cars with Miller platform and buffer, | 12 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 70,986 |
| Miles run by freight trains during the year, | 62,811 |
| Total mileage of trains earning revenue, | 133,797 |
| Total train mileage, | 133,797 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of local passengers carried, | 80,938 | | |
| Total number of passengers carried, | 80,938 | | |
| Total passenger mileage, or passengers carried one mile, | | 2,239,914 | |
| Average distance traveled by each passenger, | | 27.67 | |
| Average amount received from each passenger, | | | 0.77.2 |
| Highest rate of fare per mile, for any distance, | | | 0.05 |
| Lowest rate of fare per mile, for any distance, | | | 0.02 |
| Average rate of fare per mile, for local passengers, | | | 0.02.8 |
| Average rate of fare per mile, for all passengers, | | | 0.02.8 |

### *Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of local freight carried, | 40,624.83 | | |
| Total tons of freight carried, | 40,624.83 | | |
| Total mileage of local freight, | | 2,234,365 | |
| Total freight mileage, or tons carried one mile, | | 2,234,365 | |
| Average ton haul for local freight, | | 55 | |
| Average ton haul for all freight, | | 55 | |
| Average amount received for each ton haul, | | | 1.55.7 |
| Average rate per ton per mile, received for local freight, | | | 0.02.8 |
| Average rate per ton per mile, received for all freight, | | | 0.02.8 |

### *Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 917,727 | 22.5 |
| Flour, Provisions (beef, pork, lard, etc.), | 77,561 | 19.3 |

| | Tons. | Per Ct. |
|---|---|---|
| Animals, | 195,962 | 4.8 |
| Other agricultural products, | 222,449 | 5.4 |
| Lumber and forest products, | 769,578 | 19.0 |
| Coal, | | |
| Plaster, | | |
| Salt, | | |
| Petroleum, | | |
| Railroad iron,—iron and steel rails, | 498,928 | 1.22 |
| Pig and bloom iron, | | |
| Other iron and castings, | | |
| Ores, | | |
| Stone and brick, | | |
| Manufactures,—articles shipped from point of production, | | |
| Merchandise and other articles not enumerated above, | 682,229 | 16.8 |
| Total tons carried, | 4,062,483 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Port Huron and Northwestern Company.

Freight received at depot and office Canadian Express Company.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs, of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

None.

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

Nothing.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Average $53.00 per mile.

### *Telegraph.*

Number of miles of telegraph owned by company, . . . 119

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

None.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

### KILLED.

April 11. Albert Brandmore, brakeman, near Amadore, his own carelessness.

### INJURED.

None.

### TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | | |
| Derailments | | | | | | |
| Falling from trains | | 1 | | | | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | | 1 | | | | |

### SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 1 |
| Same in Michigan, | 1 |
| Number of persons injured during the year on the entire line, | — |
| Same for Michigan, | — |
| Number of casualties purely accidental in Michigan, | — |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 1 |
| Persons killed or injured in Michigan while intoxicated, | — |
| Trespassers and tramps killed or injured in Michigan, | — |
| Suicides in Michigan, | — |

STATE OF MICHIGAN, }
COUNTY OF ST. CLAIR, } ss.

John P. Sanborn, President, and F. L. Wells, Treasurer, of the Port Huron & Southwestern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), JOHN P. SANBORN,
FRED L. WELLS.

Subscribed and sworn to before me, this 29th day of April, A. D. 1882.
[L. S.] GEO. K. NAIRN,
*Notary Public St. Clair County, Mich.*

# ANNUAL REPORT

OF THE

# SAGINAW BAY & NORTHWESTERN RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, W. S. GERRISH, Muskegon, Mich.
*Secretary*. W. J. MILLER, Muskegon, Mich.
*Treasurer*, BEN. BIRDSALL, Portsmouth, Mich.
*General Manager*, W. S. GERRISH, Muskegon, Mich.
*Superintendent*, CHAS. MOORE, Pinconning, Mich.
*Auditor and General Freight Agent*, - F. T. LILLOTTE, Pinconning, Mich.

## DIRECTORS.

W. S. GERRISH, Muskegon, Mich.
W. J. MILLER, Muskegon, Mich.
T. H. MCGRAW, Poughkeepsie, N. Y.
BEN BIRDSALL, Portsmouth, Mich.
C. B. CURTIS, Portsmouth, Mich.
W. C. MCCLURE, East Saginaw, Mich.

Term expires October 28, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 7 |
| Number of stockholders in Michigan at same date, - - | 7 |
| Amount of full-paid stock held in Michigan at same date, - | $1,000 00 |

Date of annual meeting of stockholders,—October 28th.
Fiscal year of company ends December 31st.
General offices of the company are located at Pinconning, Mich.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, including error, $9,556.79, in last report, | | $165,765 23 |
| Total expense, including taxes, | $118,595 89 | |
| Net income, | | $47,169 34 |
| Interest on funded debt, | $1,847 79 | |
| Interest on unfunded debt, | 45 55 | |
| Balance for the year, | | $45,276 00 |
| Balance (profit and loss) last year,—deficit, | $25,000 46 | |
| Balance forward to next year, | 20,275 54 | |
| | $45,276 00 | $45,276 00 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $300,000 00 |
| Par value of shares, | $100 00 | | |
| Amount issued, $20,000.00; No. of shares, | 200 | | |
| Amount paid in on common, | | $1,000 00 | |
| Amount paid in on shares not issued (Number 2,800), | | 54,325 74 | |
| Total amount paid in as per books of the company, | | | $55,325 74 |
| Amount paid in per mile of road owned by company, | | $1,500 86 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due September 1st, 1882 and 1883, interest 7 per cent, payable annually), | $65,000 00 |
| Second Mortgage Bonds (due July 1st, 1883, interest 6 per cent, payable semi-annually), | 90,000 00 |
| Third Mortgage Bonds (Due July 1st, 1883, interest 6 per cent, payable semi-annually), | 30,000 00 |
| Total amount of funded debt, | $185,000 00 |

### FLOATING DEBT.

| | | |
|---|---|---|
| Taxes, 1880 and 1881, | $4,787 65 | |
| Interest unpaid, | 45 55 | |
| Other debts,—current credit balances, etc., | 15,125 84 | |
| | | $19,959 04 |
| Total debt liabilities, | | $204,959 04 |

| | | |
|---|---|---|
| Amount of debt liabilities per mile of road [30 miles], | $6,831 97 | |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Total expended for construction, | $168,884 61 |
| Average cost of construction per mile of road not including sidings [30 miles], | 5,629 49 |
| Proportion of cost of construction for Michigan, | 168,884 61 |

*Cost of Equipment.*

| | |
|---|---|
| Total for equipment, | $55,350 54 |
| Average cost of equipment per mile of road operated by Company [30 miles], | 1,845 02 |
| Proportion of cost of equipment for Michigan, | 55,350 54 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $224,235 25 |
| Average cost of same per mile, | 7,474 51 |
| Proportion of cost of road and equipment for Michigan, | 224,235 25 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | | |
|---|---|---|
| Main line, extension or alteration of road, | | $33,756 05 |
| Branches, extension or alteration of road, | | |
| New locomotives, | | 5,284 62 |
| New freight cars, | | 10,805 84 |
| Machine-shops, machinery and tools, | | 1,525 61 |
| Any other expenditures charged to property account (specifying the same): | | |
| Docks, | $1,038 32 | |
| Office furniture, | 410 48 | |
| Telephone line, | 14 54 | |
| | | $1,463 34 |
| Total charges to property account during the year, | | $52,835 46 |
| Net addition to property account for the year, | | $52,835 46 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | | |
| From through passengers, | $2,206 29 | |
| Total earnings, passenger department, | | $2,206 29 |

| | | |
|---|---|---|
| Earnings per train mile run [42,402 miles], | $0 05.20 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, - - - - - | $154,002 15 | |
| From through traffic, - - - - | | |
| Total earnings freight department, - - - - | | $154,002 15 |
| Earnings per train mile run [63,604 miles], | $2 42.1 | |
| Total transportation earnings, - - - - - | | $156,208 44 |
| Earnings per mile of road operated [30 miles], - - - - - - - - | $5,206 95 | |
| Earnings per train mile run, from all trains earning revenue [106,006 miles], - - | $1 49.2 | |
| Proportion of earnings for Michigan, - - | $156,208 44 | |
| Income from all other sources: | | |
| Error in report of earnings for 1880, - - - - | | 9,556 79 |
| Total income from all sources, - - - - - | | $165,765 23 |
| Proportion of income for Michigan, - - | $165,765 23 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, - - - - - - - | $25,617 96 |
| Renewal of rails, - - - - - - - - - | |
| Renewal of ties, - - - - - - - - - | |
| Repairs of bridges, including culverts and cattle guards, - | |
| Repairs of buildings, - - - - - - - - | 1,223 15 |
| Total, - - - - - - - - - - | $26,841 11 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, - - - - - - - - | $14,024 26 |
| Repairs of freight cars, - - - - - - - - | 9,031 51 |
| Total, - - - - - - - - - - | $23,055 77 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, - - - - - - - - - | $16,926 96 |
| Water-supply, - - - - - - - - - - | 610 93 |
| Oil and waste, - - - - - - - - - - | 1,956 63 |
| Locomotive service, - - - - - - - - - | 13,143 43 |

| | |
|---|---|
| Freight train service, | $7,889 75 |
| Freight train supplies, | 300 53 |
| Mileage of freight cars (debit balance), | 22 91 |
| Telegraph expenses (maintenance and operating), | 1,864 10 |
| Damages to property and cattle, | 82 00 |
| Personal injuries, | 298 05 |
| Agents and station service, | 16,992 27 |
| Station supplies, | 105 82 |
| Total, | $60,193 38 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $2,500 00 |
| Salaries of clerks in general offices, | 782 45 |
| Law expenses, | 182 55 |
| Insurance, | 234 00 |
| Stationery and printing, | 435 15 |
| Contingencies, | 885 23 |
| Taxes in Michigan, | 3,772 95 |
| Total, | $8,792 33 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $26,841 11 |
| Maintenance of motive power and cars, | 23,055 77 |
| Conducting transportation, | 60,193 38 |
| General expenses, including taxes, | 8,792 33 |
| Total operating expenses and taxes, | $118,882 59 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 30 miles, | $3,962 70 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [106,006 miles), | $1 12.14 | |
| Proportion of operating expenses and taxes for Michigan, | $118,882 59 | |
| Per centage of expenses to earnings, 76 | | |
| Net earnings per mile of road, | $1,244 25 | |
| Net earnings per train mile, | $0 37 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | $168,884 61 | |
| Equipment account, | 55,350 64 | |
| | | $224,235 25 |

| | | |
|---|---|---|
| Cash items: | | |
| Cash, | $17,834 28 | |
| Due from agents and companies, | 35,683 98 | |
| | | $53,518 26 |
| Other assets: | | |
| Materials and supplies, | $2,259 98 | |
| Debit balances, | 246 83 | |
| | | $2,806 81 |
| Total assets, | | $280,560 32 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $55,325 74 |
| Funded debt, | | 185,000 00 |
| First Mortgage, | $65,000 00 | |
| Second Mortgage, | 90,000 00 | |
| Third Mortgage, | 30,000 00 | |
| Unfunded debt: | | |
| Interest unpaid, | $45 55 | |
| Vouchers and accounts, | 15,125 84 | |
| Taxes 1880 and 1881, | 4,787 65 | |
| | | 19,959 04 |
| Profit and loss, or income accounts, | | 20,275 54 |
| Total liabilities, | | $280,560 32 |

LIABILITIES NOT INCLUDED IN BALANCE SHEET.

| | |
|---|---|
| Interest 1st and 3d mortgage, | $6,966 66 |
| Total, | $6,966 66 |

DESCRIPTION OF ROAD.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 23 50 | |
| Total length completed, | | 23 50 |

BRANCHES.

| | | |
|---|---|---|
| Sullivan's, from main line to terminus, | 4 50 | |
| Mansfield, from main line to terminus, | 2 00 | |
| Total length of branches owned by company, | | 6 50 |
| Total length of branches owned by company in Michigan, | 6 50 | |
| Total length of road belonging to this company, | | 30 00 |
| Total length of road belonging to this company in Michigan, | 30 00 | |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Aggregate length of tracks belonging to this company computed as single track, | | 30 00 |
| Same in Michigan, | 30 00 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 35 lbs., | | 30 00 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, | 2; aggregate length, feet, | 1,500 |
| Total, | 2 | 1,500 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| What railroads cross your road at grade in this State, and at what locality? Jackson, Lansing & Saginaw R. R.. at Pinconning, Mich. | |
| Number of crossings of highways at grade in this State without protection, | 4 |
| Number of crossings of highways at grade in this State without signs, | 4 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 1 |
| Same in Michigan, | 1 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 110 |
| Same in Michigan, | 110 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | None. |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Bay county. | 20 |
| Total, | 20 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 5 |
| Average length of sections,—miles, | 5 |
| Average number of men in each section gang, | 4 |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 4 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 2 |
| Number of box freight cars, | 2 |
| Number of platform cars, | 60 |
| Other cars as follows: | |
| Log cars, | 60 |
| What kind of train-brake is in use on your road? | Hand. |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 42,402 |
| Miles run by freight trains during the year, | 63,604 |
| Total mileage of trains earning revenue, | 106,006 |
| Miles run by work trains during the year, | 7,436 |
| Total train mileage, | 113,442 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Highest rate of fare per mile for any distance, | | | $0 03 |
| Lowest rate of fare per mile for any distance, | | | 0 03 |
| Average rate of fare per mile for all passengers, | | | 0 03 |

### *Freight Traffic.*

No statistics kept.

### *Tonnage of Articles Transported.*

No record kept.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

No mail service on this road.

### *Telegraph.*

| | |
|---|---|
| Number of miles of telephone line owned by company, | 21 |

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

September 12. Amos Hall, James Lynch, Reuben Wright, Mt. Forest; train struck a tree blown across track just in front of engine running in a violent storm, men instantly killed; accident unavoidable.

December 10. Edward Shanahan, fireman, St. John, plug thrown out of boiler head of locomotive, filling cab with steam and fatally scalding deceased; accidental.

December 13. Elijah Peters, Indian, Pinconning, drunk on track, struck by engine and instantly killed; trespasser.

### INJURED.

September 12. Frank Beverly, Mt. Forest, Michael Huhn, Mt. Forest, train struck tree blown across track in a storm, killing three and wounding two; accidental.

December 10. —— ——, engineer, St. John, plug in locomotive boiler head blew out, scalding the engineer severely; accidental.

### TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | | |
| Derailments | | | | | | |
| Falling from trains | | | | | 1 | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | 3 | 1 | | 3 | | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | 1 | | | |
| Total | 3 | 1 | 1 | 3 | 1 | |

### SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 5 |
| Same for Michigan, | 5 |
| Number of persons injured during the year on the entire line, | 3 |
| Same for Michigan, | 3 |
| Number of casualties purely accidental in Michigan, | 7 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 1 |

| | |
|---|---|
| Trespassers and tramps killed or injured in Michigan, - - | 1 |
| Suicides in Michigan, - - - - - - - - | — |

STATE OF MICHIGAN, }
COUNTY OF BAY, } ss.

Franklin T. Lillotte, Auditor of the Saginaw Bay & Northwestern Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first pay of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed) FRANKLIN T. LILLOTTE,
*Auditor.*

Subscribed and sworn to before me, this 31st day of July, A. D. 1882.

(L. S.) EDGAR A. CORLEY,
*Notary Public Bay County, Mich.*

# ANNUAL REPORT

OF THE

# SAGINAW VALLEY & ST. LOUIS RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* ALPHEUS HARDY, Boston, Mass.
*Secretary and Treasurer,* CHAS. MERRIAM, Boston, Mass.
*Assistant Treasurer,* JAS. E. HOWARD, Detroit, Mich.
*General Manager,* JNO. B. MULLIKEN, Detroit, Mich.
*General Superintendent,* THOS. M. FISH, Ionia, Mich.
*Superintendent,* NATHAN W. MERRILL, Saginaw, Mich.
*General Accountant,* JAS. F. REEKIE, Detroit, Mich.
*General Passenger and Freight Agent,* WM. A. CARPENTER, Detroit, Mich.
*Solicitor,* G. V. N. LOTHROP, Detroit, Mich.

## DIRECTORS.

H. H. HUNNEWELL, Boston, Mass.
ALPHEUS HARDY, Boston, Mass.
CHAS. MERRIAM, Boston, Mass.
NATHANIEL THAYER, JR., Boston, Mass.
JAS. H. BLAKE, Boston, Mass.
A. H. HARDY, Boston, Mass.
GEO. O. SHATTUCK, Boston, Mass.
CHAS. L. YOUNG, Boston, Mass.
JNO. A. BURNHAM, Boston, Mass.
CHAS. F. ADAMS, JR., Boston, Mass.
JNO. B. MULLIKEN, Detroit, Mich.
AMI W. WRIGHT, Saginaw, Mich.
HENRY L. HOLCOMB, St. Louis, Mich.

Term expires second Wednesday in July, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 178 |
| Number of stockholders in Michigan at same date, | 108 |
| Amount of full-paid stock held in Michigan at same date, | $58,400 00 |

Date of annual meeting of stockholders,—Second Wednesday in July.
Fiscal year of company ends December 31st.
General offices of the company are located at Boston, Mass., Detroit, Ionia, and Saginaw, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $100,338 92 |
| Total expense, including taxes, | $54,149 89 | |
| Net income, | | $46,189 03 |
| Interest on funded debt, | 35,679 97 | |
| Balance for the year, | | $10,509 06 |
| Balance (profit and loss) last year, | 13,552 75 | |
| Balance forward to next year, | | 3,043 69 |
| | $13,552 75 | $13,552 75 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $300,000 00 |
| Par value of shares, | $100 00 | | |
| Amount issued, $255,300.00; No. of shares, | 2,553 | | |
| Amount paid in on common, | | $255,300 00 | |
| Amount paid in on shares not issued (number 95.04), | | 9,504 01 | |
| Total amount paid in as per books of the Company, | | | $264,804 01 |
| Amount paid in per mile of road owned by company, | | $9,131 17 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1902, interest 8 per cent, payable semi-annually), | $446,000 00 |
| Total amount of funded debt, | $446,000 00 |

| | | |
|---|---|---|
| Other debts,—current credit balances, etc., | | $19,775 85 |
| Total debt liabilities, | | $465,779 85 |
| Amount of debt liabilities per mile of road [29 miles], | $16,061 39 | |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | $422,417 28 |

Contingent liabilities as follows:

Dividend assumed on $70,000.00 Saginaw & Grand Rapids Railroad Company's stock at 8 per cent per annum.

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $594,390 60 |
| Average cost of construction per mile of road (not including sidings), [29 miles], | 20,496 23 |
| Proportion of cost of construction for Michigan, | 594,390 60 |

### *Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $40,983 20 |
| Passenger, mail, and baggage cars, | 7,793 80 |
| Freight and other cars, | 38,260 00 |
| Total for equipment, | $87,037 00 |
| Average cost of equipment per mile of road operated by company [38.60 miles], | 2,254 84 |
| Proportion of cost of equipment for Michigan, | 87,037 00 |

### *Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $681,427 60 |
| Average cost of same per mile, | 23,497 50 |
| Proportion of cost of road and equipment for Michigan, | 681,427 60 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, } From through passengers, } | $41,161 95 | |
| From express and baggage, | 914 77 | |
| From mails, | 1,656 81 | |
| From other sources, passenger department, | Nothing. | |
| Total earnings, passenger department, | | $43,733 53 |

Earnings per train mile run [48,172 miles], $0 90.79

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, - - - - - } From through traffic, - - - - } | $54,748 96 | |
| From other sources, freight department, - | Nothing. | |
| Total earnings, freight department, - - - - | | $54,748 96 |
| Earnings per train mile run [24,086 miles], | $2 27.35 | |
| Total transportation earnings, - - - - - | | $98,482 49 |
| Earnings per mile of road operated [38.60 miles], - - - - - - - | $2,551 36 | |
| Earnings per train mile run, from all trains earning revenue [72,258 miles], - - | $136 29 | |
| Proportion of earnings for Michigan, - - | $98,482 49 | |
| Income from all other sources: | | |
| Telegraph earnings, - - - - | $85 77 | |
| Miscellaneous earnings, - - - - | $1,770 66 | |
| | | $1,856 43 |
| Total income from all sources for year 1881, - - | | $100,338 92 |
| Proportion of income for Michigan, - - | $100,338 92 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, - - - - - - - | $8,658 94 |
| Renewal of ties, - - - - - - - - - | 4,073 10 |
| Repairs of bridges, including culverts and cattle guards, - | 1,218 15 |
| Repairs of fences, road crossings, and signs, - - - - | 4,017 54 |
| Repairs of buildings, - - - - - - - - - | 63 57 |
| Total, - - - - - - - - - - | $18,031 30 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, - - - - - - - - | $2,414 31 |
| Repairs of passenger cars, - - - - - - - | 596 71 |
| Repairs of freight cars, - - - - - - - | 813 24 |
| Total, - - - - - - - - - - | $3,824 26 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, - - - - - - - - | $3,016 81 |
| Water-supply, - - - - - - - - - - | 297 96 |
| Oil and waste, - - - - - - - - - - | 451 34 |
| Locomotive service, - - - - - - - - - | 3,965 30 |

| | |
|---|---|
| Passenger train service, | $1,260 00 |
| Passenger train supplies, | 18 73 |
| Freight train service, | 1,892 04 |
| Freight train supplies, | 10 00 |
| Mileage of freight cars (debit balance), | 287 31 |
| Damage and loss of freight and baggage, | 8 53 |
| Damages to property and cattle, | 58 01 |
| Agents and station service, { Includes maintenance and operating of telegraph, | 4,382 90 |
| Station supplies, | 922 65 |
| Total, | $16,571 58 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $1,800 00 |
| Salaries of clerks in general offices, | 3,552 57 |
| Insurance, | 542 68 |
| Stationery and printing, | 183 34 |
| *Contingencies, | 7,616 38 |
| Taxes in Michigan, | 2,027 78 |
| Total, | $15,722 75 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $18,031 30 |
| Maintenance of motive power and cars, | 3,824 26 |
| Conducting transportation, | 16,571 58 |
| General expenses, including taxes, | 15,722 75 |
| Total operating expenses and taxes, | $54,149 89 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, operated 38.60 miles, | $1,402 85 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [72,258 miles], | $0 74.94 | |
| Proportion of operating expenses and taxes for Michigan, | $54,149 89 | |
| Per centage of expenses to earnings, 53.97 | | |
| Net earnings per mile of road operated, 38.60 | $1,196 60 | |
| Net earnings per train mile (72,567 miles), | $0 63.65 | |

ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | $594,390 60 | |
| Equipment account, | 87,037 00 | |
| | | $681,427 60 |
| Cash items: | | |
| Cash, | $4,483 56 | |
| Due from agents and companies, | 38,216 18 | |
| | | 42,699 74 |

* Includes dividend on Saginaw and G. R. R. R. stock, $7,000.00.

| | | |
|---|---|---|
| Other assets: | | |
| Materials and supplies, | $491 60 | |
| Suspense account (unearned insurance premium), | 171 23 | |
| Saginaw & G. R. R. R. stock account, | 2,750 00 | |
| | | $3,412 83 |
| Balance of income account, | | 3,043 69 |
| Total assets, | | $730,583 86 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | $264,804 01 | |
| Funded debt, | 446,000 00 | |
| | | $710,804 01 |
| Unfunded debt: | | |
| Interest unpaid, | $520 00 | |
| Vouchers and accounts, | 6,090 11 | |
| Other liabilities, | 583 02 | |
| Accrued coupon interest,—not due, | 5,946 67 | |
| Tax account State of Michigan, due July, 1882, | 2,006 78 | |
| Saginaw & G. R. R. R. Co., | 4,633 27 | |
| | | $19,779 65 |
| Total liabilities, | | $730,583 86 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Saginaw to St. Louis, January, 1873.
From Alma to St. Louis, March, 1879.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, Pains to St. Louis, | 29 00 | |
| Total length completed, | | 29 00 |
| Total length of road belonging to this company, | | 29 00 |
| Total length of road belonging to this company in Michigan, | 29 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 2 80 |
| Same in Michigan, | 2 80 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 31 80 |
| Same in Michigan, | 31 80 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 50 lbs. | 31 80 | |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Name, description, and length of each: | | |
| Saginaw & Grand Rapids R. R. Co., | 3 60 | |
| Jackson, Lansing & Saginaw R. R. Co., | 6 00 | |
| Total length of above roads, | | 9 60 |
| Total length of above roads in Michigan, | 9 60 | |
| Total miles of road operated by this company, | | 38 60 |
| Total miles of road operated by this company in Michigan, | 38 60 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 4; aggregate length, feet, | 435 |
| Total, | 4 | 435 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 11 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 68 |
| Number of cattle guards renewed during the year, | None. |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality? None.

What railroads cross your road either over or under your grade in this State, and where? None.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 34 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | None |
| Number of crossings of highways at grade in this State without signs, | None. |
| Number of crossings of highways over railroad, | None. |
| Number of crossings of highways under railroad, | None. |
| Number of highway bridges 18 feet above track, | None. |
| Number of highway bridges less than 18 feet above track, | None. |
| Have safety-guards been erected at over-head obstructions? | No. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 16 |
| Same in Michigan, | 16 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 35 |
| Same in Michigan, | 35 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? All fenced except as below. | |
| What is the average cost per rod? Cannot say. | |
| The total cost of same? Cannot say. | |
| How many miles of new fencing have you built during the year? | 19 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Saginaw county, three miles on each side, | 6 |
| In Gratiot county, two miles on each side, | 4 |
| Total miles, | 10 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 8 |
| Average length of sections, miles, | 4 |
| Average number of men in each section gang, | 2.25 |
| Number of new ties put in whole line during the year, | 13,577 |
| Number of new ties put in track in Michigan, | 13,577 |
| Average number of new ties per mile of road owned, | 468 |
| New rails put in track: None. | |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 27,205 |
| Amount of trestle work replaced with earth during the year (linear feet), | None. |
| Timber culverts replaced with stone,—number, | None. |
| Timber culverts replaced with iron pipe,—number, | None. |
| Timber culverts replaced with sewer pipe,—number, | None. |
| Timber culverts replaced with timber — [number —], timber used (feet B. M.), | None. |
| New bridges built during year,—number: | |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Swan Creek | Pile | Wood | November | 150 |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 4 |
| Number of passenger cars—8-wheel, | 2 |
| Number express and baggage cars, | 2 |
| Number of box freight cars, | 10 |
| Number of platform cars, | 40 |
| Number of conductors' way cars, | 1 |
| Number of locomotives equipped with train-brake, | 2 |
| What kind of train-brake is in use on your road? Laughbridge air brake. | |
| Number of passenger train cars with Miller platform and buffer, | 3 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 48,172 |
| Miles run by freight trains during the year, | 24,086 |
| Total mileage of trains earning revenue, | 72,258 |
| Miles run by switching trains, | 309 |
| Total train mileage, | 72,567 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 2 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 78 |
| Average number of cars in freight trains, | 11 |
| Average weight of freight trains, exclusive of freight,—tons, | 178 |

### *Passenger Traffic.*

| | | | |
|---|---|---|---|
| Total number of passengers carried, | 67,938 | | |
| Total passenger mileage, or passengers carried one mile, | | 1,389,836 | |
| Average distance traveled by each passenger, | | 20.46 | |
| Average amount received from each passenger, | | | $0.60.58 |
| Highest rate of fare per mile, for any distance, | | | 0.04 |
| Lowest rate of fare per mile, for any distance, | | | 0.01.5 |
| Average rate of fare per mile, for all passengers, | | | 0.02.96 |

### *Freight Traffic.*

| | | | |
|---|---|---|---|
| Total tons of freight carried, | 35,707 | | |
| Total freight mileage, or tons carried one mile, | | 1,003,961 | |
| Average amount received for each ton haul, | | | $1.53 |
| Average rate per ton per mile, received for all freight, | | | 0.05.43 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 2,455 | 6.88 |
| Flour, | 405 | 1.14 |
| Provisions (beef, pork, lard, etc.), | 370 | 1.04 |
| Animals, | 161 | .45 |
| Other agricultural products, | 829 | 2.32 |
| Lumber and forest products, | 22,250 | 62.31 |
| Coal, | 380 | 1.06 |
| Plaster, | 26 | .07 |
| Salt, | 658 | 1.84 |
| Stone and brick, | 2,663 | 7.46 |
| Manufactures,—articles shipped from point of production, | 687 | 1.92 |
| Merchandise and other articles not enumerated above, | 4,823 | 13.51 |
| Total tons carried, | 35,707 | 100.00 |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company. They pay this company one and one-half regular freight rates for freight. They deliver their freight on board the cars.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

All freight and transportation companies can run their cars over this road, for which this company will pay the usual mileage. No preference is given except to live stock or perishable property.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Erie & Chicago Car Co., Detroit, Mich., | $25 92 |
| Merchants' Despatch Transportation Co., New York, N. Y., | 6 73 |
| Empire Line, Philadelphia, Pa., | 4 10 |
| Total, | $36 75 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

No.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$1,656.81 per annum with usual terms of service.

*Telegraph.*

Number of miles of telegraph owned by company, - -

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

The Western Union Telegraph Company,—29 miles.

REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

No accidents this year.

STATE OF MICHIGAN, } ss.
COUNTY OF WAYNE, }

Jno. B. Mulliken, General Manager, Jas. E. Howard, Assistant Treasurer, of the Saginaw Valley & St. Louis Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, J. B. MULLIKEN,
JAMES E. HOWARD,

Subscribed and sworn to before me, this 17th day of April, A. D. 1882.

[L. S.] URIAH B. ROGERS,
*Notary Public.*

# ANNUAL REPORT

OF THE

# ST. JOSEPH VALLEY RAILROAD COMPANY, .

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* WILLIAM R. ROUGH, Buchanan, Mich.
*Vice President,* GEO. H. RICHARDS, Buchanan, Mich.
*Secretary,* ROSCOE D. DIX, Berrien Springs, Mich.
*Treasurer,* A. F. ROSS, Buchanan, Mich.
*General Manager,* WM. R. ROUGH, Buchanan, Mich.
*General Superintendent,* WM. R. ROUGH, Buchanan, Mich.
*Chief Engineer,* W. W. GRAVES, Buchanan, Mich.
*Auditor,* R. D. DIX, Berrien Springs, Mich.
*Attorney,* J. J. VAN RIPER, Buchanan, Mich.

## DIRECTORS.

WILLIAM R. ROUGH, Buchanan, Mich.
WM. PEARS, Buchanan, Mich.
J. J. VAN RIPER, Buchanan, Mich.
SOLOMAN ROUGH, Buchanan, Mich.
GEO. H. RICHARDS, Buchanan, Mich.
ROSCOE D. DIX, Berrien Springs, Mich.
BURNS HELMICK, Berrien Springs, Mich.
CALVIN B. POTTER, St. Joseph, Mich.
WARREN CHAPMAN, St. Joseph, Mich.

Term expires 1st February, 1883.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 22 |
| Number of stockholders in Michigan at same date, | 22 |
| Amount of full-paid stock held in Michigan at same date, | $53,400 00 |

Date of annual meeting of stockholders,—First Monday in February.
Fiscal year of company ends 1st of February.
General offices of the company are located at Buchanan, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $1,265 68 |
| Total expense, including taxes, | $4,025 75 | |
| Net deficit, | $2,760 07 | |
| Balance for the year, | $2,760 07 | |
| Balance forward to next year, | | 2,760 07 |
| | $2,760 07 | $2,760 07 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $100,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $53,400.00; No. shares, | | 534 | |
| Amount paid in on common, | | $53,400 00 | |
| Total amount paid in as per books of the company, | | | $53,400 00 |
| Amount realized in cash, | | $53,400 00 | |
| Amount paid in per mile of road owned by company,—10 miles, | | $5,340 00 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due now, interest 8 per cent, payable annually), | | $25,000 00 |
| Total amount of funded debt, | | $25,000 00 |
| Amount received from the same in cash, | $25,000 00 | |

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for construction, | $16,711 77 | |
| Incurred for equipment, | 1,800 00 | |
| Incurred for real estate, | 1,787 00 | |
| | | $20,298 77 |
| Total debt liabilities, | | $45,298 77 |

| | |
|---|---|
| Amount of debt liabilities per mile of road [10 miles], | $4,529 87 |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Grading and masonry, | $23,168 04 |
| Bridging, | 10,182 50 |
| Superstructure, including rails, | 36,138 59 |
| Land, land damages, and fences, | 7,354 66 |
| Passenger and freight stations, wood-sheds and water stations, | 734 12 |
| Engine-houses, car-sheds, and turn-tables, | 1,003 08 |
| Interest paid during construction, discounts, etc., | 2,548 72 |
| Engineering, agencies, salaries, and other expenses during construction, | 3,499 26 |
| All other items charged to construction not enumerated above, | 5,676 12 |
| Total expended for construction, | $90,305 09 |
| Average cost of construction per mile of road (not including sidings), [10 miles], | 9,030 50 |
| Proportion of cost of construction for Michigan, | 90,305 09 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $4,907 50 |
| Passenger, mail, and baggage cars, | 2,115 13 |
| Freight and other cars, | 798 10 |
| Machinery and tools, | 672 95 |
| Total for equipment, | $8,493 68 |
| Average cost of equipment per mile of road operated by company [10 miles], | $849 36 |
| Proportion of cost of equipment for Michigan, | 8,493 68 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $98,798 77 |
| Average cost of same per mile, | 9,879 87 |
| Proportion of cost of road and equipment for Michigan, | 98,798 77 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $669 20 | |
| From through passengers, | | |
| From express and baggage, | 63 74 | |
| Total earnings, passenger department, | | $732 94 |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, - - - - - } From through traffic, - - - - } | $532 74 | |
| Total earnings, freight department, - - - - | | $532 74 |
| Total transportation earnings, - - - - - | | $1,265 68 |
| Earnings per mile of road operated [10 miles], | $126 56 | |
| Proportion of earnings for Michigan, - - | $1,265 68 | |
| Total income from all sources, - - - - - | | $1,265 68 |
| Proportion of income for Michigan, - - | $1,265 68 | |

EXPENSES.

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Damages to property and cattle, - - - - - - - | $106 00 |
| Total, - - - - - - - - - - | $106 00 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, - - - | $3,500 00 |
| Law expenses, - - - - - - - - - - | 250 00 |
| Stationery and printing, - - - - - - - - | 169 75 |
| Total, - - - - - - - - - - | $3,919 75 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Conducting transportation, - - - - - - - | | $106 00 |
| General expenses, including taxes, - - - - - - | | 3,919 75 |
| Total operating expenses and taxes, - - - - - | | $4,025 75 |
| Operating expenses and taxes per mile of road, 10 miles, - - - - - - - | $402 57 | |
| Proportion of operating expenses and taxes for Michigan, - - - - - - | $4,025 75 | |
| Per centage of expenses to earnings, - 318 | | |
| Net deficit per mile of road, - - - | 276 00.01 | |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, - - - - - - - - - | $90,305 09 |
| Equipment account, - - - - - - - - - - | 8,393 68 |
| Total assets, - - - - - - - - - - | $98,698 77 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $53,400 00 |
| Funded debt, | | 25,000 00 |
| Unfunded debt: | | |
| Construction, | $16,711 77 | |
| Equipment, | 1,800 00 | |
| Real estate, | 1,787 00 | |
| | | 20,298 77 |
| Total liabilities, | | $98,698 77 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Buchanan to Berrien Springs, September 1st, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths |
|---|---|---|
| Length completed in Michigan, | 10 00 | |
| Total length completed, | | 10 00 |
| Total length of road belonging to this company, | | 10 00 |
| Total length of road belonging to this company in Michigan, | 10 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 13 |
| Same in Michigan, | 13 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 10 13 |
| Same in Michigan, | 10 13 | |
| Gauge of track, 3 feet. | | |
| Total length of tracks laid with iron rails, weight per yard, 30 lbs., | | 10 13 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, number of, | 13; aggregate length, feet, | 1,644 |
| Total, | 13 | 1,644 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 3 |
| Sewer pipe, | 27 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 27 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 11 |
| Number of crossings of highways at grade in this State without signs, | 11 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 2 |
| Same in Michigan, | 2 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 18 |
| Same in Michigan, | 18 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | None. |
| Give the miles of fence needed on both sides of your track, in Michigan traversed by your road: | |
| In Berrien county, | 16 |
| Total miles, | 16 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 1 |
| Average length of sections (miles), | 10 |
| Average number of men in each section gang, | 10 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of passenger cars—8-wheel, | 1 |
| Number of platform cars, | 3 |

MILEAGE, TRAFFIC, ETC.

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Highest rate of fare per mile, for any distance, | | | 0.04 |
| Lowest rate of fare per mile, for any distance, | | | 0.03 |
| Average rate of fare per mile, for all passengers, | | | 0.03.5 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $53,400 00 |
| Funded debt, | | 25,000 00 |
| Unfunded debt: | | |
| Construction, | $16,711 77 | |
| Equipment, | 1,800 00 | |
| Real estate, | 1,787 00 | |
| | | 20,298 77 |
| Total liabilities, | | $98,698 77 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Buchanan to Berrien Springs, September 1st, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths |
|---|---|---|
| Length completed in Michigan, | 10 00 | |
| Total length completed, | | 10 00 |
| Total length of road belonging to this company, | | 10 00 |
| Total length of road belonging to this company in Michigan, | 10 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 13 |
| Same in Michigan, | 13 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 10 13 |
| Same in Michigan, | 10 13 | |
| Gauge of track, 3 feet. | | |
| Total length of tracks laid with iron rails, weight per yard, 30 lbs., | | 10 13 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, number of, | 13; aggregate length, feet, | 1,644 |
| Total, | 13 | 1,644 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 3 |
| Sewer pipe, | 27 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 27 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 11 |
| Number of crossings of highways at grade in this State without signs, | 11 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 2 |
| Same in Michigan, | 2 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 18 |
| Same in Michigan, | 18 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | None. |
| Give the miles of fence needed on both sides of your track, in Michigan traversed by your road: | |
| In Berrien county, | 16 |
| Total miles, | 16 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 1 |
| Average length of sections (miles), | 10 |
| Average number of men in each section gang, | 10 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of passenger cars—8-wheel, | 1 |
| Number of platform cars, | 3 |

MILEAGE, TRAFFIC, ETC.

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Highest rate of fare per mile, for any distance, | | | 0.04 |
| Lowest rate of fare per mile, for any distance, | | | 0.03 |
| Average rate of fare per mile, for all passengers, | | | 0.03.5 |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company; take their freights at depot; general express business; terms, twenty cents for one hundred pounds.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Not settled.

STATE OF MICHIGAN, }
COUNTY OF BERRIEN, } ss.

William Pears and Roscoe D. Dix, two directors of the St. Joseph Valley Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), WM. PEARS,
ROSCOE D. DIX,

Subscribed and sworn to before me, this 24th day of May, A. D. 1882.

[L. S.] GEORGE H. MURDOCK,
*Justice of the Peace.*

# ANNUAL REPORT

OF THE

# TAWAS & BAY COUNTY RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* C. H. PRESCOTT, Bay City, Mich.
*Secretary,* JOHN M. WATERBURY, Tawas City, Mich.
*Treasurer,* C. H. PRESCOTT, Bay City, Mich.
*General Superintendent,* JOHN M. WATERBURY, Tawas City, Mich.

## DIRECTORS.

W. I. BROTHERTON, Bay City, Mich.
E. B. DENISON, Bay City, Mich.
T. R. DENISON, Bay City, Mich.
C. H. PRESCOTT, Bay City, Mich.
NELSON NELLES, Bay City, Mich.

Term expires April 11, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election, . . . 10
Number of stockholders in Michigan at same date, . . 10
Date of annual meeting of stockholders,—April 11.
Fiscal year of company ends December 31st.
General offices of the company are located at Tawas City, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $28,329 29 |
| Total expense, including taxes, | $16,081 84 | |
| Net income, | | $12,247 45 |
| Interest on funded debt, | $2,916 67 | |
| Balance for the year, | | $9,330 78 |
| Balance (profit and loss) last year, | 989 13 | |
| Items not included in above, as follows: | | |
| Retired one bond due February, 1881, | 8,333 33 | |
| Balance forward to next year, | 8 32 | |
| | $9,330 78 | $9,330 78 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $160,000 00 |
| Par value of shares, | $100 00 | |
| Amount paid in on shares not issued (number 403), | 4,005 00 | |
| Total amount paid in as per books of the company, | | 4,005 00 |
| Amount paid in per mile of road owned by company, | $174 13 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due February, 1882 to February, 1886, interest 7 per cent, payable annually), | $41,666 67 |
| Total amount of funded debt, | $41,666 67 |

### FLOATING DEBT.

| | |
|---|---|
| Incurred for construction, | $56,328 33 |
| Total debt liabilities, | $97,995 00 |
| Amount of debt liabilities per mile of road [23 miles], | 4,260 65 |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road, and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Total expended for construction,—estimated, | $102,000 00 |
| Average cost of construction per mile of road (not including sidings), [23 miles], | 4,434 78 |
| Proportion of cost of construction for Michigan, | 102,000 00 |

*Cost of Equipment.*

Rolling stock and equipment rented.

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $102,000 00 |
| Average cost of same per mile, | 4,434 78 |
| Proportion of cost of road and equipment for Michigan, | 102,000 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $2,487 33 | |
| Total earnings, passenger department, | | $2,487 33 |

No regular passenger trains run.

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $25,841 96 | |
| Total earnings, freight department, | | $25,841 96 |
| Earnings per train mile run [36,000 miles], | $0 72 | |
| Total transportation earnings, | | $28,329 29 |
| Earnings per mile of road operated [23 miles], | $1,231 71 | |
| Earnings per train mile run, from all trains earning revenue [36,000 miles], | $0 78.6 | |
| Proportion of earnings for Michigan, | $28,329 29 | |
| Total income from all sources, | | $28,329 29 |
| Proportion of income for Michigan, | $28,329 29 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $10,231 44 |
| Renewal of rails, | 2,579 18 |
| Renewal of ties, | 80 00 |
| Repairs of bridges, including culverts and cattle guards, | 564 79 |
| Repairs of buildings, | 241 19 |
| Total, | $13,696 60 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

Kept in repair by owner.

CLASS 3.—*Conducting Transportation.*

Operated by owner of the rolling stock.

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $1,787 66 |
| Stationery and printing, | 30 90 |
| Taxes in Michigan, | 566 68 |
| Total, | $2,385 24 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $13,696 60 |
| General expenses, including taxes, | | 2,385 24 |
| Total operating expenses and taxes, | | $16,081 84 |
| Operating expenses and taxes per mile of road, 23 miles, | $609 46 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [36,000 miles], | $0 44.67 | |
| Proportion of expenses and taxes for Michigan, | $16,081 84 | |
| Per centage of expenses to earnings, | 57 | |
| Net earnings per mile of road, | $622 25 | |
| Net earnings per train mile, | $0 33.93 | |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $102,000 00 |
| Cash items: | |
| Cash, | 8 32 |
| Total assets, | $102,008 32 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $4,005 00 |
| Funded debt, | 41,666 67 |
| Unfunded debt: | |
| Amount due on account of construction, | 56,328 33 |
| Profit and loss, or income accounts, | 8 32 |
| Total liabilities, | $102,008 32 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Tawas to Prescott, 21 miles, 1878.
From Prescott to Camp Three, 2 miles, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, Tawas to Prescott, | 21 00 | |
| Total length completed, | | 21 00 |

BRANCHES.

| | | |
|---|---|---|
| From Prescott to Camp Three, | 2 00 | |
| Total length of branches owned by company, | | 2 00 |
| Total length of branches owned by company in Michigan, | 2 00 | |
| Total length of road belonging to this company, | | 23 00 |
| Total length of road belonging to this company in Michigan, | 23 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 4 00 |
| Same in Michigan, | 4 00 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 27 00 |
| Same in Michigan, | 27 00 | |
| Gauge of track 3 feet, 2 inches. | | |
| Total length of track laid with iron rails, weight per yard 20 lbs., | | 23 00 |
| Total miles of road operated by this company, | | 23 00 |
| Total miles of road operated by this company in Michigan, | 23 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 5; aggregate length, feet, | 1,500 |
| Total, | 5 | 1,500 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 15 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 8 |
| Same in Michigan, | 8 |

*Employés.*

Including persons employed by owner of rolling stock:

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 65 |
| Same in Michigan, | 65 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 4 |
| Average length of sections,—miles, | 6 |
| Average number of men in each section gang, | 7 |
| Number of new ties put in whole line during the year, | 1,000 |
| Number of new ties put in track in Michigan, | 1,000 |
| Average number of new ties per mile of road, | 43 |
| New rails put in track: | |
| Iron [tons 44], miles, | 1.33 |
| Total miles of track laid with new rails, | 1.33 |
| Between what points were new rails laid: | |
| Prescott and Tawas. | |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges and culverts during the year (feet B. M.), | 26,000 |
| Amount of trestle work replaced with earth during the year (liner feet), | 5,280 |
| New bridges built during the year,—number, | 1 |

| LOCATION. | KIND. | MATERIAL. | MONTH BUILT. | FEET IN LENGTH. |
|---|---|---|---|---|
| Tawas City | Trestle on piles | Timber | July | 200 |

ROLLING STOCK.

Owned by party operating the road:

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 3 |
| Number of platform cars, | 5 |
| Number of conductors' way cars, | 2 |
| 4 wheel logging cars, | 106 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by freight trains during the year, | 36,000 |
| Total mileage of trains earning revenue, | 36,000 |
| Miles run by work trains during the year, | 1,200 |
| Miles run by switching trains,* | 2,548 |
| Total train mileage, | 39,748 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in freight trains, | 16 |
| Average weight of freight trains, exclusive of freight, | 30,000 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of local passengers carried, | 6,909 | | |
| Total number of passengers carried, | 6,909 | | |
| Total passenger mileage, or passengers carried one mile, | | 82,911 | |
| Average distance traveled by each passenger, | | 12 | |
| Average amount received from each passenger, | | | 0.36 |
| Highest rate of fare per mile, for any distance, | | | 0.03.50 |
| Lowest rate of fare per mile, for any distance, | | | 0.03.25 |
| Average rate of fare per mile, for all passengers, | | | 0.03.25 |

### *Freight Traffic.*

| | | | |
|---|---|---|---|
| Number of tons of local freight carried, | 91,165 | | |
| Total tons of freight carried, | 91,165 | | |
| Total freight mileage, or tons carried one mile, | | 1,276,310 | |
| Average ton haul for local freight, | | 14 | |
| Average ton haul for all freight, | | 14 | |
| Average amount received for each ton haul, | | | 0.28 |
| Average rate per ton per mile, received for local freight, | | | 0.02 |
| Average rate per ton per mile, received for all freight, | | | 0.02 |

### *Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, Flour, Provisions (beef, pork, lard, etc.), Animals, | 1,278 | 1.4 |
| Lumber and forest products, | 89,887 | 98.6 |
| Total tons carried, | 91,165 | 100. |

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1881.

### INJURED.

September 20. John McIntosh, gravel train, Tawas City, got off while train was in motion.

October. Wm. Thompson, brakeman, Tawas City, coupling cars.

### TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | 1 | |
| Derailments | | | | | | |
| Falling from trains | | | | | | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | 1 | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | | | | | 2 | |

### SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons injured during the year on the entire line, | 2 |
| Same for Michigan, | 2 |
| Number of casualties purely accidental in Michigan, | 1 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 1 |

STATE OF MICHIGAN, }
COUNTY OF BAY, } ss.

E. B. Denison and C. H. Prescott, directors of the Tawas & Bay County Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), E. B. DENISON,
C. H. PRESCOTT.

Subscribed and sworn to before me, this 11th day of May, A. D. 1882.
[L. S.] R. S. PRATT,
*Notary Public in and for said county.*

ANNUAL REPORT

OF THE

# TOLEDO, ANN ARBOR & GRAND TRUNK RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JAS. M. ASHLEY, Toledo, O.
*Vice President,* JOHN B. ALLEY, Boston, Mass.
*Secretary.* C. F. COOK, New York.
*General Manager,* M. D. WOODFORD, Jackson, Mich.
*Superintendent,* H. W. ASHLEY, Toledo, O.
*Superintendent of Telegraph,* M. D. BAKER, Toledo, O.
*Auditor,* B. F. JERVIS, Toledo, O.
*General Passenger and Freight Agent,* W. H. BENNETT, Toledo, O.
*Attorney,* JAS. M. ASHLEY, JR., Toledo, O.

## DIRECTORS.

JAS. M. ASHLEY, Toledo, O.
GEO. EMERSON, Toledo, O,
C. L. LUCE, Toledo, O.
JAS. M. ASHLEY, JR., Toledo, O.
JAS. ROBISON, JR., Toledo, O.
F. C. CHAPIN, Toledo, Ohio.

Term expires October, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 12 |
| Number of stockholders in Michigan at same date, - - | 4 |
| Amount of full-paid stock held in Michigan at same date, - | 4 |

Date of annual meeting of stockholders,—1st Wednesday in October.

Fiscal year of company ends December 31st.
General offices of the company are located at Toledo, O.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $118,672 14 |
| Total expense, including taxes, | $103,119 72 | |
| Net income, | | $15,552 42 |
| Interest on funded debt, | $15,150 00 | |
| Balance for the year, | | $402 42 |
| Balance (profit and loss) last year, | $1,164 20 | |
| Items not included in above, as follows: | | |
| For amount received on items charged in last report, | | 8,699 58 |
| Balance forward to next year, | 7,937 80 | |
| | $9,102 00 | $9,102 00 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $1,900,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $459,200.00; No. of shares, | 4,592 | | |
| Amount paid in on common, | | $459,200 00 | |
| Amount paid in on shares not issued, | | 39 51 | |
| Total amount paid in as per books of the company, | | | $459,239 51 |
| Amount realized in cash, | | $406,359 89 | |
| Amount in property, | | 52,879 62 | |
| Amount paid in per mile of road owned by company, 61 miles, | | | $7,528 50 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due January 1st, 1921, interest 6 per cent, payable July and January), | $1,260,000 00 |
| Total amount of funded debt, | $1,260,000 00 |

| | | |
|---|---|---|
| Amount received from the same in cash, | $101,957 22 | |
| Amount received from the same in property, | 80,000 00 | |

FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for construction, | $45,000 00 | |
| Incurred for real estate, | 1,071 00 | |
| Other debts,—current credit balances, etc., | 53,573 85 | |
| | | $99,644 85 |
| Total debt liabilities, | | $1,359,644 85 |
| Amount of debt liabilities per mile of road [61 miles], | $22,289 26 | |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | $56,732 65 |

COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Grading and masonry, | $196,631 17 |
| Bridging, | 16,851 10 |
| Superstructure (including rails), | 329,873 28 |
| Land, land damages and fences, | 36,809 49 |
| Passenger and freight stations, woodsheds, and water stations, | 9,812 23 |
| Engine houses, car sheds and turn-tables, | 10,312 27 |
| Interest paid during construction, discount, etc., | 106 34 |
| Engineering, agencies, salaries, and other expenses during construction, | 5,790 32 |
| All other items charged to construction not enumerated above, | 84,339 64 |
| Total expended for construction, | $681,244 84 |
| Average cost of construction per mile of road not including sidings [61 miles], | 11,167 94 |
| Proportion of cost of construction for Michigan, | 625,405 09 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $5,000 00 |
| Passenger, mail, and baggage cars, | 3,272 22 |
| Freight and other cars, | 4,869 81 |
| Machinery and tools, | 770 31 |
| Total for equipment, | $13,912 34 |
| Average cost of equipment per mile of road operated by Company [61 miles], | 228 07 |
| Proportion of cost of equipment for Michigan, | 12,771 98 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $695,157 18 |
| Average cost of same per mile, | 11,396 01 |
| Proportion of cost of road and equipment for Michigan, | 638,177 07 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension or alteration of road, | $100,766 58 |
| Land, | 3,325 74 |
| New locomotives, | 3,000 00 |
| New passenger cars, | 3,272 22 |
| New freight cars, | 4,869 81 |
| Machine-shops, machinery and tools, | 649 48 |
| New fences, | 3,118 71 |
| Total charges to property account during the year, | $119,002 54 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $16,024 50 | |
| From through passengers, | 8,549 72 | |
| From express and baggage, | 1,774 69 | |
| From mails, | 2,890 64 | |
| Total earnings, passenger department, | | $29,239 55 |
| Earnings per train mile run [45,046 miles], | $0 64.9 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $22,722 12 | |
| From through traffic, | 24,864 07 | |
| Total earnings freight department, | | $47,586 19 |
| Earnings per train mile run [31,689 miles], | $1 50 | |
| Total transportation earnings, | | $76,825 74 |
| Earnings per mile of road operated [61 miles], | $1,259 44 | |
| Earnings per train mile run, from all trains earning revenue [76,735 miles], | $1 00.1 | |
| Proportion of earnings for Michigan, | $70,528 53 | |
| Rents for use of road, stations, etc., | | 13,462 50 |
| Income from all other sources, | | 28,383 90 |
| Total income from all sources, | | $118,672 14 |
| Proportion of income for Michigan, | $108,944 92 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | | |
|---|---|---|
| Repairs of roadway and track, | | $15,161 61 |
| Renewal of ties, | | 2,413 58 |
| Repairs of bridges, including culverts and cattle guards, | | 2,991 51 |
| Repairs of fences, road crossings, and signs, | | 846 70 |
| Repairs of buildings, | | 478 53 |
| Total, | | $21,891 93 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | | |
|---|---|---|
| Repairs of locomotives, | | $10,090 83 |
| Repairs of passenger cars, | | 1,616 64 |
| Repairs of freight cars, | | 2,651 11 |
| Total, | | $14,358 58 |

CLASS 3.—*Conducting Transportation.*

| | | |
|---|---|---|
| Fuel for locomotives, | | $12,949 31 |
| Water-supply, | | 507 87 |
| Oil and waste, | | 1,125 52 |
| Locomotive service, | | 7,443 35 |
| Passenger train service, | | 2,136 53 |
| Passenger train supplies, | | 138 36 |
| Mileage of passenger cars (debit balance) | | 88 77 |
| Freight train service, | | 2,088 19 |
| Freight train supplies, | | 133 34 |
| Mileage of freight cars (debit balance), | | 1,785 77 |
| Telegraph expenses (maintenance and operating), | | 1,414 50 |
| Damage and loss of freight and baggage, | | 79 20 |
| Damages to property and cattle, | | 1,199 86 |
| Personal injuries, | | 53 45 |
| Agents and station service, | | 21,400 95 |
| Station supplies, | | 1,075 24 |
| Total, | | $53,620 21 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $2,241 66 |
| Salaries of clerks in general offices, | | 1,445 00 |
| Law expenses, | | 1,238 14 |
| Stationery and printing, | | 52 85 |
| Outside agencies and advertising, | | 286 95 |
| Contingencies, | | 2,418 89 |
| Taxes in Michigan, | 2,754 58 | |
| Taxes in other States, | 2,810 93 | |
| | | 5,565 51 |
| Total, | | $13,249 00 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $21,891 93 |
| Maintenance of motive power and cars, | | 14,358 58 |
| Conducting transportation, | | 53,620 21 |
| General expenses, including taxes, | | 13,249 00 |
| Total operating expenses and taxes, | | $103,119 72 |
| Operating expenses and taxes per mile of road, | 1,690 48 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [76,735 miles), | $1 34.3 | |
| Proportion of operating expenses and taxes for Michigan, | $94,667 27 | |
| Per centage of expenses to earnings, 134 | | |
| Net deficit per mile of road, | $431 04 | |
| Net deficit per train mile, | $0 34.2 | |

## ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, | | $681,244 84 |
| Equipment account, | | 13,912 34 |
| Other investments (specifying same): | | |
| Real estate, | | 10,700 00 |
| Cash items: | | |
| Cash, | $22,157 05 | |
| Due from agents and companies, | 18,703 19 | |
| | | 40,860 24 |
| Other assets: | | |
| Debit balances, | | 2,051 96 |
| Bonds delivered J. B. Alley, | $656,000 00 | |
| Bonds delivered J. M. Ashley, | 510,000 00 | |
| | $1,166,800 00 | |
| Less cash received, | 87,947 22 | |
| | | 1,078,052 78 |
| Total assets, | | $1,826,822 16 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $459,239 51 |
| Funded debt, | | 1,260,000 00 |
| | | $1,719,239 51 |
| Unfunded debt: | | |
| Interest unpaid, | $151 50 | |
| Notes payable, | 18,677 95 | |
| Vouchers and accounts, | 65,816 90 | |
| | | 99,644 85 |
| Profit and loss, or income accounts, | | 7,937 80 |
| Total liabilities, | | $1,826,822 16 |

## DESCRIPTION OF ROAD.

### MAIN LINE.

Date when the road or portions thereof were opened for public use:
From Ann Arbor, Mich., to Toledo, Ohio, June, 1878.
From Ann Arbor, Mich,, to South Lyon, Mich, August, 1881.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 56 00 | |
| Length completed in Ohio, | 5 00 | |
| Total length completed, | | 61 00 |
| Total length of road belonging to this company, | | 61 00 |
| Total length of road belonging to this company in Michigan, | 56 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 2 60 |
| Same in Michigan, | 2 50 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 63 60 |
| Same in Michigan, | 58 50 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 50 lbs., | | 63 60 |
| Total miles of road operated by this company, | | 61 00 |
| Total miles of road operated by this company in Michigan, | 56 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 5; aggregate length, feet, | 1,279 |
| Wooden trestles, number of, | 5; aggregate length, feet, | 820 |
| Total, | 10 | 2,099 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 76 |
| Stone, number, | 1 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 90 |
| Number of cattle guards renewed during the year, | 11 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Lake Shore & M. S. R. R., at Monroe Junction, Mich.
Lake Shore & M. S. R. R., at Dundee, Mich.
Lake Shore & M. S. R. R., at Pittsfield, Mich.

Wabash, St. Louis & Pacific R. R., at Milan, Mich.

What railroads cross your road either over or under your grade in this State, and where?

Michigan Central R. R., at Ann Arbor, Mich., under.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 12 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | None. |
| Number of crossings of highways at grade in this State without signs, | 14 |
| Number of crossings of highways over railroad, | 1 |
| Number of crossings of highways under railroad, | None. |
| Number of highway bridges 18 feet above track, | 1 |
| Number of highway bridges less than 18 feet above track, | None. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 17 |
| Same in Michigan, | 14 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 144 |
| Same in Michigan, | 23 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 79 |
| What is the average cost per rod? | $0 66 | |
| The total cost of same? | $16,684 80 | |
| How many miles of new fencing have you built during the year? | | 8 |

Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road:

| | |
|---|---|
| In Oakland county. | 4 |
| In Washtenaw county, | 26 |
| In Monroe county, | 3 |
| Total, | 33 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 11 |
| Average length of sections,—miles, | 5 |
| Average number of men in each section gang, | 3 |
| Number of new ties put in whole line during the year, | 12,333 |
| Number of new ties put in track in Michigan, | 9,333 |
| Average number of new ties per mile of road, | 202 |

| | |
|---|---|
| New rails put in track: | |
| Iron [tons 117] miles, | 1.50 |
| Total miles of track laid with new rails, | 1.50 |
| Between what points were new rails laid: | |
| Toledo and Ann Arbor. | |

*Bridges and Culverts.*

| | |
|---|---|
| Amount of timber used in renewals of wooden bridges during the year (feet B. M.), | 28,653 |
| Timber culverts replaced with timber,—[number, 9] timber used (feet B. M.), | 10,258 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 4 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 2 |
| Number of passenger cars—8-wheel, | 9 |
| Number of express and baggage cars, | 2 |
| Number of box freight cars, | 30 |
| Number of platform cars, | 95 |
| Number of locomotives equipped with train-brake, | 2 |
| Number of cars used in passenger trains equipped with train-brake, | 9 |
| What kind of train-brake is in use on your road? | Westinghouse air. |
| Number of passenger train cars with Miller platform and buffer, | 5 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 45,046 |
| Miles run by freight trains during the year, | 31,689 |
| Total mileage of trains earning revenue, | 76,735 |
| Total train mileage, | 76,735 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 65 |
| Average number of cars in freight trains, | 14 |
| Average weight of freight trains, exclusive of freight,—tons, | 154 |

*Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 7,979 | | |
| Number of local passengers carried, | 34,902 | | |
| Total number of passengers carried, | 42,881 | | |
| Total passenger mileage, or passengers carried one mile, | | 910,553 | |
| Average distance traveled by each passenger, | | 21.23 | |
| Average amount received from each passenger, | | | 0.57.3 |
| Highest rate of fare per mile for any distance, | | | 0.03 |
| Lowest rate of fare per mile for any distance, | | | 0.00.55 |
| Average rate of fare per mile, for through passengers, | | | 0.02.38 |
| Average rate of fare per mile, for local passengers, | | | 0.02.90 |
| Average rate of fare per mile for all passengers, | | | 0.02.70 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 37,688 | |
| Number of tons of local freight carried, | 23,768 | |
| Total tons of freight carried, | 61,456 | |
| Total mileage of through freight, | | 1,951,063 |
| Total mileage of local freight, | | 568,995 |
| Total freight mileage, or tons carried one mile, | | 2,520,058 |
| Average ton haul for through freight, | | 51.76 |
| Average ton haul for local freight, | | 23.93 |
| Average ton haul for all freight, | | 41.00 |
| Average amount received for each ton haul, | | $0.77.43 |
| Average rate per ton per mile, received for through freight, | | 01.27 |
| Average rate per ton per mile, received for local freight, | | 03.99 |
| Average rate per ton per mile, received for all freight, | | 01.88 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 2,475 | 4.03 |
| Flour, | 1,740 | 2.83 |
| Provisions (beef, pork, lard, etc.), | 166 | .27 |
| Animals, | 157 | .26 |
| Other agricultural products, | 998 | 1.62 |
| Lumber and forest products, | 20,442 | 33.26 |
| Coal, | 24,944 | 40.59 |
| Petroleum, | 192 | .31 |

| | Tons. | Per Ct. |
|---|---|---|
| Railroad iron,—iron and steel rails, | 24 | .04 |
| Pig and bloom iron, | 1,840 | 2.99 |
| Other iron and castings, | 324 | .53 |
| Ores, | 57 | .09 |
| Stone and brick, | 1,590 | 2.59 |
| Manufactures,—articles shipped from point of production, | 2,662 | 4.33 |
| Merchandise and other articles not enumerated above, | 3,845 | 6.26 |
| Total tons carried, | 61,456 | 100. |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company; 1½ first-class; general; freight taken at depots only; ½ passenger fare for messenger.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

None.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

None.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

Regular rates.

### *Telegraph.*

Number of miles of telegraph owned by company, . . . 46

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

Western Union Telegraph Company, . . . . . 46

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

None.

### INJURED.

September 6. Eli Jenkins, brakeman, north of Pittsfield, fell from freight train.

## TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | | |
| Derailments | | | | | | |
| Falling from trains | | | | | 1 | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | | | | | 1 | |

## SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | None. |
| Same for Michigan, | None. |
| Number of persons injured during the year on the entire line, | 1 |
| Same for Michigan, | 1 |
| Number of casualties purely accidental in Michigan, | 1 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | None. |
| Persons killed or injured in Michigan while intoxicated, | None. |
| Trespassers and tramps killed or injured in Michigan, | None. |
| Suicides in Michigan, | None. |

STATE OF OHIO, }
COUNTY OF LUCAS, } ss.

B. F. Jervis, Auditor, and H. W. Ashley, Superintendent, of the Toledo, Ann Arbor, and Grand Trunk Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed) B. F. JERVIS,
H. W. ASHLEY,

Subscribed and sworn to before me, this 13th day of April, A. D. 1882.
[L. S.] EDWARD D. MOORE,
*Notary Public Lucas County, Ohio.*

THE STATE OF OHIO, }
LUCAS COUNTY, } ss.

I, R. C. Quiggle, Clerk of the Court of Common Pleas, the same being a Court of Record within and for the county of Lucas and State of Ohio, do hereby certify that Edward D. Moore, before whom the annexed instrument was acknowledged, and to the certificate whereof he has signed his name officially, in his own handwriting, was, at the date thereof, and now is, a Notary Public within and for said county of Lucas, duly commissioned and sworn as such, and that by virtue of said office and the laws of the State of Ohio, he was fully authorized to take the acknowledgement of deeds and other instruments of writing.

I further certify, that the annexed instrument is duly executed and acknowledged as required by the laws of the State of Ohio. Also, that I am acquainted with the hand-writing of the above-named Notary Public, and verily believe his official signature to the annexed certificate to be genuine.

In testimony whereof, I hereunto subscribe my name and affix the seal of said court, at the city of Toledo, this 13th day of April, A. D. 1882.

[L. S.]

R. C. QUIGGLE, *Clerk.*
N. HADNETT, *Deputy.*

# ANNUAL REPORT

OF THE

# TOLEDO, CANADA SOUTHERN & DETROIT RAILWAY COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAS. TILLINGHAST, Buffalo, N. Y.
*Secretary*, C. F. COX, New York City.
*Treasurer*, C. VANDERBILT, New York City.
*General Manager*, W. P. TAYLOR, Buffalo, N.
*Division Superintendent*, E. P. MURRAY, Toledo, Ohio.
*Chief Engineer*, A. R. TREW, St. Thomas, Ont.
*Auditor*, R. J. PELTON, St. Thomas, Ont.
*General Passenger Agent*, W. H. HURLBURT, Buffalo, N. Y.
*General Freight Agent*, W. H. PERRY, Buffalo, N. Y.

## DIRECTORS.

JAS. TILLINGHAST, Buffalo, N. Y.
EDWARD A. WICKS, New York.
CORNELIUS VANDERBILT, New York.
AUGUSTUS SCHELL, New York.
EDWIN D. WORCESTER, New York.
SAMUEL F. BARGER, New York.
JOSEPH HARKER, New York.
GEO. W. DAVIS, Toledo, Ohio.
WILLIAM L. SCOTT, Erie, Pa.

Term expires June 2d, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 64 |
| Number of stockholders in Michigan at same date, - - | None. |

Amount of full-paid stock held in Michigan at same date, None.
Date of annual meeting of stockholders,—June 3d.
Fiscal year of company ends December 31st.
General offices of the company are located at Grosse Isle, Mich.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $472,592 39 |
| Total expense, including taxes, | $504,284 59 | |
| Net deficit, | $31,692 20 | |
| Interest on funded debt, | 105,000 00 | |
| Balance for the year,—deficit, | $136,692 20 | |
| Balance (profit and loss) last year, | 1,239,731 76 | |
| Items not included in above, as follows: | | |
| Construction expenditure, | 28,862 00 | |
| Balance forward to next year,—deficit, | | 1,405,285 96 |
| | $1,405,285 96 | $1,405,285 96 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $2,000,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $1,547,662.50; No. of shares, | 15,476 | | |
| Amount paid in on common, | | $1,547,662 50 | |
| Total amount paid in as per books of the Company, | | | $1,547,662 50 |
| Amount in property, | | 1,547,662 50 | |
| Amount paid in per mile of road owned by company, | | $27,701 13 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1906, interest 7 per cent, payable January and July), | $1,500,000 00 |
| First Mortgage Bonds Scrip, | 11,737 50 |
| Total amount of funded debt, | $1,511,737 50 |

FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for unpaid coupons, | $892,780 00 | |
| Incurred for unpaid operating expenses, | 460,627 58 | |
| | | 1,353,407 58 |
| Total debt liabilitiés, | | $2,865,145 08 |
| Amount of debt liabilities per mile of road [55.87 miles], | | $51,282 35 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | $2,865,145 08 |

COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| *Total expended for construction, | $3,064,991 03 |
| Average cost of construction per mile of road (not including sidings), [55.87 miles], | 54,859 33 |
| Proportion of cost of construction for Michigan, | 2,593,200 52 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $3,064,991 03 |
| Average cost of same per mile, | 54,859 33 |
| Proportion of cost of road and equipment for Michigan, | 2,593,200 52 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Passenger and freight stations, wood-sheds, and water stations, | $2,232 10 |
| New fences, | 641 29 |
| Any other expenditures charged to property account (specifying the same): | |
| Sidings, | 14,655 61 |
| New bridges, | 11,333 00 |
| Total charges to property account during the year, | $28,862 00 |
| Net addition to property account for the year, | $28,862 00 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, PASSENGER.

| | |
|---|---|
| From local passengers, | $163,488 18 |
| From through passengers, | |
| From express and baggage, | 5,627 32 |
| From mails, | 10,187 36 |
| Total earnings, passenger department, | $179,302 86 |

* Includes $42,153.92 additions to property during 1880, but not carried into the construction accounts for that year.

| | | |
|---|---|---|
| Earnings per train mile run [289,852 miles], | $0 61.86 | |

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | | $292,844 97 |
| From through traffic, | | |
| From other sources, freight department, | | 444 56 |
| Total earnings, freight department, | | $293,289 53 |
| Earnings per train mile run [342,443 miles], | $0 85.64 | |
| Total transportation earnings, | | $472,592 39 |
| Earnings per mile of road operated [55.87 miles], | $8,458 78 | |
| Earnings per train mile run, from all trains earning revenue [632,295 miles], | $0 74.64 | |
| Proportion of earnings for Michigan, | $399,846 81 | |
| Total income from all sources for year 1881, | | $472,592 39 |
| Proportion of income for Michigan, | $399,846 81 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $33,555 45 |
| Renewal of ties, | 20,120 74 |
| Repairs of bridges, including culverts and cattle guards, | 6,897 33 |
| Repairs of fences, road crossings, and signs, | 2,181 59 |
| Repairs of buildings, | 3,054 72 |
| Total, | $65,809 83 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $25,713 68 |
| Repairs of passenger cars, | 10,986 18 |
| Repairs of freight cars, | 40,857 19 |
| Total, | $77,557 05 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $46,910 99 |
| Water-supply, | 6,676 92 |
| Oil and waste, | 7,623 08 |
| Locomotive service, | 22,966 98 |
| Passenger train service, | 6,769 30 |
| Passenger train supplies, | 1,003 96 |
| Freight train service, | 18,679 82 |
| Freight train supplies, | 3,144 76 |

| | |
|---|---|
| Mileage of freight cars (debit balance), | $38,642 58 |
| Telegraph expenies (maintenance and operating), | 6,863 29 |
| Damage and loss of freight and baggage, | 2,957 12 |
| Damages to property and cattle, | 339 48 |
| Personal injuries, | 1,140 53 |
| Agents and station service, $30,358.83; switching, $30,898.92, | 61,257 75 |
| Station supplies, | 5,879 13 |
| Total, | $230,855 69 |

CLASS 4.—*General Expenses.*

| | | |
|---|---|---|
| Salaries of the general officers of the company, | | $6,653 69 |
| Salaries of clerks in general offices, | | 7,341 30 |
| Law expenses, | | 5,105 31 |
| Insurance, | | 75 75 |
| Stationery and printing, | | 2,393 04 |
| Outside agencies and advertising, | | 29,982 20 |
| Contingencies, | | 66,684 92 |
| Taxes in Michigan, | $11,087 78 | |
| Taxes in other States, | 738 03 | |
| | | 11,825 81 |
| Total, | | $130,062 02 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $65,809 83 |
| Maintenance of motive power and cars, | 77,557 05 |
| Conducting transportation, | 230,855 69 |
| General expenses, including taxes, | 130,062 02 |
| Total operating expenses and taxes, | $504,284 59 |

| | |
|---|---|
| Operating expenses and taxes per mile of road operated, 55.87 miles, | $9,026 04 |
| Operating expenses and taxes per train mile run, for trains earning revenue [632,295 miles], | $0 79.75 |
| Proportion of operating expenses and taxes for Michigan, | $426,660 91 |
| Per centage of expenses to earnings, 106.07 | |
| Net deficit per mile of road operated, | $567 26 |
| Net deficit per train mile, | $0 07.17 |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $3,064,991 03 |
| Other investments (specifying same): | |
| Real estate, | 13,546 51 |
| Other assets: | |
| Income account, | 1,334,270 04 |
| Total assets, | $4,412,807 58 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $1,547,662 50 |
| Funded debt,—First Mortgage Bonds, | 1,511,737 50 |
| Unfunded debt: | |
| Interest unpaid, | $892,780 00 |
| Canada Southern Railway, Lessee, | 460,627 58 |
| Total liabilities, | $4,412,807 58 |

LIABILITIES NOT INCLUDED IN BALANCE SHEET.

Nothing.

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Toledo, Ohio, to Grand Trunk Junction, Mich., September 1st, 1873.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 47 27 | |
| Length completed in Ohio, | 8 60 | |
| Total length completed, | | 55 87 |
| Total length of road belonging to this company, | | 55 87 |
| Total length of road belonging to this company in Michigan, | 47 27 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated. | | 21 71 |
| Same in Michigan, | 12 46 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 77 58 |
| Same in Michigan, | 59 73 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 60 lbs., | | 55 87 |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs. | | 21 71 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

None.

| | | |
|---|---|---|
| Total miles of road operated by this company, | | 55 87 |
| Total miles of road operated by this company in Michigan, | 47 27 | |

*Number of Bridges and Trestles in Michigan.*

| | | | |
|---|---|---|---|
| Wooden bridges, number of, | 4; | aggregate length, feet, | 445 |
| Iron bridges, number of, | 3; | aggregate length, feet, | 578 |
| Wooden trestles, number of, | 65; | aggregate length, feet, | 9,535 |
| Total, | 72 | | 10,558 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Chicago & Canada Southern R. R., at Slocum Junction.
Toledo & Ann Arbor R. R., at Alexis.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 58 |
| Number of crossings of highways at grade in this State at which there are gates or flagmen, | 1 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 17 |
| Same in Michigan, | 15 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 578 |
| Same in Michigan, | 504 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 71.98 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 8 |
| Average length of sections, miles, | 5.87 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 22,378 |
| Number of new ties put in track in Michigan, | 20,671 |
| Average number of new ties per mile of road owned, | 437 |

ROLLING STOCK.

None owned.

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 289,852 |
| Miles run by freight trains during the year, | 342,443 |
| Total mileage of trains earning revenue, | 632,295 |
| Total train mileage, | 632,295 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 128 |
| Average number of cars in freight trains, | 22 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | | | |
| Number of local passengers carried, | | | |
| Total number of passengers carried, | 262,050 | | |
| Total passenger mileage, or passengers carried one mile, | | 6,289,200 | |
| Average distance traveled by each passenger, | | 24 | |
| Average amount received from each passenger, | | | $0.60 |
| Highest rate of fare per mile, for any distance, | | | 0.05 |
| Lowest rate of fare per mile, for any distance, | | | 0.00.50 |
| Average rate of fare per mile, for through passengers, | | | 0.01.50 |
| Average rate of fare per mile, for local passengers, | | | 0.02.40 |
| Average rate of fare per mile, for all passengers, | | | 0.01.85 |

### *Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 2,075,553 | |
| Number of tons of local freight carried, | | |
| Total tons of freight carried, | 2,075,553 | |
| Total mileage of through freight, | | 50,034,659 |
| Total mileage of local freight, | | |
| Total freight mileage, or tons carried one mile, | | 50,034,659 |

| | | |
|---|---|---|
| Average ton haul for through freight, | | |
| Average ton haul for local freight, | | |
| Average ton haul for all freight, | 24.1 | |
| Average amount received for each ton haul, | | 0.14 |
| Average rate per ton per mile, received for through freight, | | |
| Average rate per ton per mile, received for local freight, | | |
| Average rate per ton per mile, received for all freight, | | 0.00.58 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 628,103 | 30.29 |
| Flour, | 144,575 | 06.97 |
| Provisions (beef, pork, lard, etc.), | 66,943 | 03.22 |
| Animals, | 79,385 | 03.82 |
| Other agricultural products, | 60,774 | 02.93 |
| Lumber and forest products, | 232,327 | 11.19 |
| Coal, | 273,986 | 13.20 |
| Petroleum, | 1,069 | 00.04 |
| Railroad iron,—iron and steel rails, | 94,641 | 04.56 |
| Pig and bloom iron, | 47,897 | 02.30 |
| Other iron and castings, | 6,629 | 00.32 |
| Ores, | 20,582 | 00.99 |
| Stone and brick, | 6,714 | 00.33 |
| Manufactures,—articles shipped from point of production, | 106,728 | 05.14 |
| Merchandise and other articles not enumerated above, | 305,200 | 14.70 |
| Total tons carried, | 2,075,553 | 100.00 |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company, paying once and one-half first-class rates.

*Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Canada Southern Line; Erie & N. S. Despatch; Blue Line; M. D. Transportation Company; Hoosac Tunnel Line.

All these lines, except M. D. T. Co., are owned by the roads over which they run, they receiving all earnings, and each bearing its proportion of expenses. The M. D. T. Co. is a corporate Company, and receives a commission on business. No preference given.

What amount have you paid other corporations, car loaning companies

[stock companies], or individuals, *not operating railroads,* for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

Nothing.

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Wagner drawing-room and sleeping cars. Customary rates.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Nothing.

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$10,187.36 per annum, being $162.31 per mile for 44 miles and $171.30 per mile for 17.32 miles.

*Telegraph.*

Number of miles of telegraph owned by company, - - 54.54

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

None.

REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

August 6. I. Hanser, passenger, Slocum Junction, Mich., got off train and went into eating house, or was walking about platform, and in attempting to get on train after it started, fell and train crushed his arm; wound bled but very little and man was taken to Detroit at his own request, taken to his home, when Doctor Farrand amputated his arm. In attempting to get up fell out of bed, bursting the ligatures and bled to death.

September 20. H. Smith, freight brakeman, Ecorces, Mich., fell from train between cars and was killed; coroner's verdict accidental death.

INJURED.

February 12. Wm. Bradshaw, brakeman, M. C. Junction, Mich., while coupling cars in yard, had finger and thumb crushed.

March 22. Jerry Hastings, Slocum Junction, Mich., while attempting to jump on passing train, fell under and train passed over one limb,

May 23. Thos. McDamalto, brakeman, Slocum Junction, Mich., while coupling train and engine got his right hand caught between drawbars, causing some bruises.

July 26. Eli Calthorpe, brakeman, Lasalle, Mich., while coupling cars had forefinger of his right hand broken.

September 3. M. M. Wight, brakeman, W. W. Junction, Ohio, while switching had end of thumb smashed.

September 20. M. M. Wight, brakeman, Monroe, while coupling two cars got his right hand badly smashed.

October 8. E. D. Walker, brakeman, West Toledo, Ohio, fell from flat car loaded with lumber, train passed over his left leg; amputated just above ankle.

TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | KILLED. | | | INJURED. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | 5 | |
| Derailments | | | | | | |
| Falling from trains | | 1 | | | 1 | |
| Frogs | | | | | | |
| Getting on and off trains. | 1 | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | | | | 1 | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | 1 | 1 | | | 7 | |

SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 2 |
| Same for Michigan, | 2 |
| Number of persons injured during the year on the entire line, | 7 |
| Same for Michigan, | 5 |
| Number of casualties purely accidental in Michigan, | 5 |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | 5 |

PROVINCE OF ONTARIO, }
COUNTY OF ELGIN, } ss.

R. J. Pelton, Auditor of the Toledo, Canada Southern & Detroit Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), R. J. PELTON,
*Auditor.*

Subscribed and sworn to before me, this 27th day of April, A. D. 1882.
[L. S.] JOHN FARLY,
*Notary Public.*

# ANNUAL REPORT

OF THE

# TOLEDO & SOUTH HAVEN RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, F. B. ADAMS, Lawton, Mich.
*Vice President*, JOHN W. FREE, Paw Paw, Mich.
*Secretary*, HENRY FORD, Lawton, Mich.
*Treasurer*, EDWIN MARTIN, Paw Paw, Mich.
*General Superintendent*, JOHN IHLING, Lawton, Mich.

## DIRECTORS.

F. B. ADAMS, Lawton, Mich.
HENRY FORD, Lawton, Mich.
G. W. LAWTON, Lawton, Mich.
JOHN IHLING, Lawton, Mich.
J. W. FREE, Paw Paw, Mich.
L. C. HURD, Paw Paw, Mich.
EDWIN MARTIN, Paw Paw, Mich.

Term expires 2d Tuesday in January, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election, . 7
Number of stockholders in Michigan at same date, . . 7
Amount of full-paid stock held in Michigan at same date:
Stock not issued yet.
Date of annual meeting of stockholders,—Second Tuesday in January.
Fiscal year of company ends December 31st.
General offices of the company are located at Lawton, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $6,671 54 |
| Total expense, including taxes, | $5,373 10 | |
| Net income, | | $1,298 44 |
| Interest on funded debt, | $1,200 00 | |
| Balance for the year, | | $98 44 |
| Balance (profit and loss) last year, | | $787 82 |
| Balance forward to next year, | $886 26 | |
| | $886 26 | $886 26 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $100,000 00 |
| Amount paid in on shares not issued (number —), | $51,659 27 | |
| Total amount paid in as per books of the company, | | $51,659 27 |
| Amount realized in cash, | $51,659 27 | |
| Amount paid in per mile of road owned by company, | | $5,739 92 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | | |
|---|---|---|
| First Mortgage Bonds (due 1883, interest 8 per cent, payable quarterly), | | $15,000 00 |
| Total amount of funded debt, | | $15,000 00 |
| Amount received from the same in cash, | $15,000 00 | |

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred in any other manner and how: | | |
| Taxes, 1881, | | 133 45 |
| Total debt liabilities, | | $15,133 45 |
| Amount of debt liabilities per mile of road [9 miles], | | $1,581 50 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $45,854 17 |
| Average cost of construction per mile of road (not including sidings), [9 miles], | 5,095 00 |
| Proportion of cost of construction for Michigan, | 45,854 17 |

*Cost of Equipment.*

| | |
|---|---|
| Total for equipment, | $16,573 02 |
| Average cost of equipment per mile of road operated by company [9 miles], | $1,841 44 |
| Proportion of cost of equipment for Michigan, | 16,573 02 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $62,427 19 |
| Average cost of same per mile, | 6,936 85 |
| Proportion of cost of road and equipment for Michigan, | 62,427 19 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $2,902 23 | |
| From mails, | 200 00 | |
| Total earnings, passenger department, | | $3,102 23 |
| Earnings per train mile run [11,268 miles], | $0.27.53 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, From through traffic, | $3,569 31 | |
| Total earnings, freight department, | | $3,569 31 |
| Earnings per train mile run [11,268 miles], | $0 31.67 | |
| Total transportation earnings, | | $6,671 54 |
| Earnings per mile of road operated [9 miles], | $741 28 | |
| Earnings per train mile run, from all trains earning revenue [11,268 miles], | $0 59.20 | |
| Proportion of earnings for Michigan, | $6,671 54 | |
| Total income from all sources, | | $6,671 54 |
| Proportion of income for Michigan, | $6,671 54 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $509 68 |
| Repairs of bridges, including culverts and cattle guards, and turn-table, | 2 66 |
| Repairs of fences, road-crossings, and signs, | 3 00 |
| Repairs of buildings, | 103 88 |
| Total, | $619 22 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $32 19 |
| Repairs of freight cars, | 57 75 |
| Total, | $89 94 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $206 96 |
| Water-supply, | 53 00 |
| Oil and waste, | 113 88 |
| Locomotive service, | 626 54 |
| Train service, | 206 69 |
| Train supplies, | 8 59 |
| Agents and station service, | 678 57 |
| Station supplies, | 85 46 |
| Total, | $1,979 69 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $1,200 00 |
| Salaries of clerks in general offices, | 1,200 00 |
| Stationery and printing, | 10 74 |
| Contingencies, | 140 06 |
| Taxes in Michigan, | 133 45 |
| Total, | $2,684 25 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $619 22 |
| Maintenance of motive power and cars, | 89 94 |
| Conducting transportation, | 1,979 69 |
| General expenses, including taxes, | 2,684 25 |
| Total operating expenses and taxes, | $5,373 10 |

Operating expenses and taxes per mile of road, 9 miles, $597 01

| | | |
|---|---|---|
| Operating expenses and taxes per train mile run, for trains earning revenue [11,268 miles], | $47 68 | |
| Proportion of operating expenses and taxes for Michigan, | $5,373 10 | |
| Per centage of expenses to earnings, | 80 | |
| Net earnings per mile of road, | $144 27 | |
| Net earnings per train mile, | $0 11.52 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $45,854 17 |
| Equipment account, | | 16,573 02 |
| Cash items: | | |
| Cash, | $423 50 | |
| Due from agents and companies, | 956 25 | |
| | | 1,379 75 |
| Other assets: | | |
| Materials and supplies, | | 3,972 04 |
| Total assets, | | $67,678 98 |

### LIABILITIES.

| | |
|---|---|
| Capital stock, | $51,659 27 |
| Funded debt, | 15,000 00 |
| Unfunded debt: | |
| Taxes, 1881, | 133 45 |
| Profit and loss, or income accounts, | 886 26 |
| Total liabilities, | $67,678 98 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Paw Paw to Lawrence, October 1st, 1877.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 9 00 | |
| Total length completed, | | 9 00 |
| Total length of road belonging to this company, | | 9 00 |
| Total length of road belonging to this company in Michigan, | 9 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 40 |
| Same in Michigan, | 40 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 9 40 |

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Same in Michigan, | 9 40 | |
| Gauge of track, 3 feet. | | |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs., | | 9 40 |
| Total miles of road operated by this company, | | 9 40 |
| Total miles of road operated by this company in Michigan, | 9 40 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 2; aggregate length, feet, | 160 |
| Total, | 2 | 160 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 2 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 24 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 9 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 2 |
| Same in Michigan, | 2 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 12 |
| Same in Michigan, | 12 |

*Fencing.*

| | | |
|---|---|---|
| How many miles of fencing have you on your road in Michigan? | | 17.00 |
| What is the average cost per rod? | $0 60 | |
| The total cost of same? | $3,264 00 | |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 1 |
| Average length of sections (miles), | 9 |
| Average number of men in each section gang, | 3 |

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 1 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of passenger cars—8-wheel, | 2 |
| Number of box freight cars, | 2 |
| Number of platform cars, | 3 |
| Number of locomotives equipped with train-brake, | 2 |
| Number of cars used in passenger trains equipped with train-brake, | 2 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by mixed trains during the year, | 11,268 |
| Total mileage of trains earning revenue, | 11,268 |
| Total train mileage, | 11,268 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars,—mixed, | 3 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 9,674 | | |
| Number of local passengers carried, | | | |
| Total number of passengers carried, | 9,674 | | |
| Total passenger mileage, or passengers carried one mile, | | 87,066 | |
| Average distance traveled by each passenger, | | 8 | |
| Average amount received from each passenger, | | | 0.30 |
| Average rate of fare per mile, for all passengers, | | | 0.03.75 |

### *Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 2,042 | |
| Number of tons of local freight carried, | 641 | |
| Total tons of freight carried, | 2,683 | |
| Total mileage of through freight, | | 18,378 |
| Total mileage of local freight, | | 4,487 |
| Total freight mileage, or tons carried one mile, | | 22,865 |

| | |
|---|---|
| Average ton haul for through freight, | 9 |
| Average ton haul for local freight, | 7 |
| Average ton haul for all freight, | 8.52 |
| Average amount received for each ton haul, | 1.33 |
| Average rate per ton per mile, received for all freight, | 0.15.61 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 296 | 11.04 |
| Flour, | 16 | .59 |
| Animals, | 174 | 6.48 |
| Other agricultural products, | 441 | 5.25 |
| Lumber and forest products, | 677 | 25.25 |
| Coal, | 641 | 23.90 |
| Plaster, | 1 | .03 |
| Salt, | 6 | .22 |
| Petroleum, | 21 | .78 |
| Other iron and castings, | 12 | .44 |
| Manufactures,—articles shipped from point of production, | 408 | 15.21 |
| Merchandise and other articles not enumerated above, | 290 | 10.81 |
| Total tons carried, | 2,683 | 100.00 |

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American; 20c per 100 lbs.

STATE OF MICHIGAN, }
COUNTY OF VAN BUREN, } ss.

John Ihling, lessee of the Toledo & South Haven Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, J. IHLING,

Subscribed and sworn to before me, this 17th day of May A. D. 1882.

[L. S.] GEO. W. LAWTON,
*Notary Public.*

# ANNUAL REPORT

OF THE

# TRAVERSE CITY RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, PERRY HANNAH, Traverse City, Mich.
*Secretary*, THOS. T. BATES, Traverse City, Mich.
*Treasurer*, CHARLES A. CRAWFORD, Traverse City, Mich.

## DIRECTORS.

PERRY HANNAH, Traverse City, Mich.
SMITH BARNES, Traverse City, Mich.
D. C. LEACH, Traverse City, Mich.
J. D. HARVEY, Traverse City, Mich.
W. H. C. MITCHELL, Reed City, Mich.
GEO. W. CASS, New York, N. Y.

Term expires October 7, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 71 |
| Number of stockholders in Michigan at same date, - - | 69 |
| Amount of full-paid stock held in Michigan at same date, - | $34,500 00 |

Date of annual meeting of stockholders,—October 7th.
Fiscal year of company ends December 31st.
General offices of the company are located at Traverse City, Mich.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $28,303 21 |
| Total expense, including taxes, | $26,107 15 | |
| Net income, | | $2,196 06 |
| Interest on funded debt, | $17,500 00 | |
| Balance for the year, | $15,303 94 | |
| Balance (profit and loss) last year,—deficit, | 102,695 85 | |
| Balance forward to next year, | | 117,999 79 |
| | $117,999 79 | $117,999 79 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $205,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $205,000.00; No. of shares, | 2,050 | | |
| Amount paid in on common, | | $205,000 00 | |
| Total amount paid in as per books of the company, | | | $205,000 00 |
| Amount realized in cash, | | $205,000 00 | |
| Amount paid in per mile of road owned by company, 61 miles, | | | 8,192 30 |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due 1902, interest 7 per cent, payable semi-annually), | $250,000 00 |
| Total amount of funded debt, | $250,000 00 |
| Amount received from the same in cash, $250,000 00 | |

### FLOATING DEBT.

| | |
|---|---|
| Current credit balances, etc., | $134,818 26 |
| Total debt liabilities, | $384,818 26 |
| Amount of debt liabilities per mile of road [26 miles], | 14,800 70 |

| | |
|---|---|
| Amount of liabilities, after deducting all assets not representing permanent investments, | $372,164 27 |
| Contingent liabilities as follows: | |
| Nothing. | |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, | $459,164 54 |
| Average cost of same per mile, | 17,660 18 |
| Proportion of cost of road and equipment for Michigan, | 459,164 54 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $12,147 80 | |
| From through passengers, | 2,992 57 | |
| From express and baggage, | 1,784 10 | |
| From mails, | 1,211 17 | |
| Total earnings, passenger department, | | $18,135 64 |
| Earnings per train mile run [22,492 miles], | $0 86.6 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $6,560 93 | |
| From through traffic, | 3,273 00 | |
| Total earnings freight department, | | $9,833 93 |
| Earnings per train mile run [15,706 miles], | $0 62.6 | |
| Total transportation earnings, | | $27,969 57 |
| Earnings per mile of road operated [26 miles], | $1,075 75 | |
| Earnings per train mile run, from all trains earning revenue [38,198 miles], | $0 73.2 | |
| Proportion of earnings for Michigan, | $27,969 54 | |
| Income from all other sources: | | |
| Telegraph, | | 333 64 |
| Total income from all sources, | | $28,303 21 |
| Proportion of income for Michigan, | $28,303 21 | |

### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $6,568 65 |
| Renewal of rails, | 591 26 |
| Renewal of ties, | 2,814 31 |

| | |
|---|---|
| Repairs of bridges, including culverts and cattle guards. | $217 85 |
| Repairs of fences, road crossings, and signs, | 33 50 |
| Repairs of buildings, | 77 27 |
| Total, | $10,302 84 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $1,263 52 |
| Repairs of passenger cars, | 532 02 |
| Repairs of freight cars, | 108 61 |
| Total, | $1,904 15 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $3,285 72 |
| Oil and waste, | 260 71 |
| Locomotive service, | 1,660 08 |
| Passenger train service, | 810 88 |
| Passenger train supplies, | 3 65 |
| Mileage of passenger cars (debit balance), | 1,386 89 |
| Freight train service, | 885 82 |
| Freight train supplies, | 29 51 |
| Mileage of freight cars (debit balance) | 2 63 |
| Telegraph expenses (maintenance and operating), | 573 25 |
| Damage and loss of freight and baggage, | 18 06 |
| Damages to property and cattle, | 789 00 |
| Agents and station service, | 2,092 40 |
| Station supplies, | 141 74 |
| Total, | $11,940 34 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $351 38 |
| Salaries of clerks in general offices, | 550 78 |
| Stationery and printing, | 282 29 |
| Outside agencies and advertising, | 163 86 |
| Contingencies, | 32 57 |
| Taxes in Michigan, | 578 94 |
| Total, | $1,959 82 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $10,302 84 |
| Maintenance of motive power and cars, | 1,904 15 |
| Conducting transportation, | 11,940 34 |
| General expenses, including taxes, | 1,959 82 |
| Total operating expenses and taxes, | $26,107 15 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | $1,004 12 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [38,198 miles], | $0 68 | |
| Proportion of expenses and taxes for Michigan, | $26,107 15 | |
| Per centage of expenses to earnings, 92.24 | | |
| Net earnings per mile of road, | $84 46 | |
| Net earnings per train mile, | $0 05.8 | |

## ASSETS AND LIABILITIES.

### ASSETS.

| | | |
|---|---|---|
| Construction account, | | $459,164 54 |
| Cash items: | | |
| Cash, | $11,103 58 | |
| Due from agents and companies, | 1,640 35 | |
| | | 12,653 93 |
| Other assets: | | |
| Income account, | | 117,999 79 |
| Total assets, | | $589,818 26 |

### LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $205,000 00 |
| Funded debt, | | 250,000 00 |
| Unfunded debt: | | |
| Interest unpaid, | $123,160 56 | |
| Vouchers and accounts, | 1,319 70 | |
| Other liabilities, | 10,338 00 | |
| | | 134,818 26 |
| Total liabilities, | | $589,818 26 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Walton Junction to Traverse City, December, 1872.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 26 00 | |
| Total length completed, | | 26 00 |
| Total length of road belonging to this company, | | 26 00 |
| Total length of road belonging to this company in Michigan, | 26 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 76 |
| Same in Michigan, | 76 | |

| | | |
|---|---|---|
| Aggregate length of tracks belonging to this company computed as single track, | | 26 76 |
| Same in Michigan, | 26 76 | |
| Gauge of track 4 feet, 9 inches. | | |
| Total length of track laid with iron rails, weight per yard 50 lbs., | | 26 76 |
| Total miles of road operated by this company, | | 26 00 |
| Total miles of road operated by this company in Michigan, | 26 00 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 2; aggregate length, feet, | 103 |
| Wooden trestles, number of, | 10; aggregate length, feet, | 525 |
| Total, | 12 | 628 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 22 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle-guards in Michigan, | 6 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 30 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 6 |
| Same in Michigan, | 6 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 30 |
| Same in Michigan, | 30 |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 1 |
| What is the average cost per rod? | Cannot answer. |
| The total cost of same? | Cannot answer. |
| How many miles of new fencing have you built during the year? | .25 |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Grand Traverse county, | 51 |
| Total miles, | 51 |

## REPAIRS AND RENEWALS.

### *Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 4 |
| Average length of sections,—miles, | 6.5 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 15,449 |
| Number of new ties put in track in Michigan, | 15,449 |
| Average number of new ties per mile of road, | 594 |

### *Bridges and Culverts.*

Included in report of G. R. & I. R. R. Co.

## ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |
| Number of platform cars, | 10 |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 22,492 |
| Miles run by freight trains during the year, | 15,706 |
| Total mileage of trains earning revenue, | 38,198 |
| Miles run by work trains during the year, | 198 |
| Miles run by switching trains, | 3,312 |
| Total train mileage, | 41,708 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 3.38 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 95 |
| Average number of cars in freight trains, | 3.72 |
| Average weight of freight trains, exclusive of freight,—tons, | 70.00 |

### *Passenger Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of through passengers carried, | 4,275 | | |
| Number of local passengers carried, | 22,733 | | |
| Total number of passengers carried, | 27,008 | | |

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Total passenger mileage, or passengers carried one mile, | | 545,992 | |
| Average distance traveled by each passenger, | | 20.22 | |
| Average amount received from each passenger, | | | 0.56 |
| Highest rate of fare per mile for any distance, | | | 0.03 |
| Lowest rate of fare per mile for any distance, | | | 0.00.6 |
| Average rate of fare per mile, for through passengers, | | | 0.02.69 |
| Average rate of fare per mile, for local passengers, | | | 0.02.79 |
| Average rate of fare per mile for all passengers, | | | 0.02.77 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of through freight carried, | 4,700 | |
| Number of tons of local freight carried, | 7,257 | |
| Total tons of freight carried, | 11,957 | |
| Total mileage of through freight, | | 114,507 |
| Total mileage of local freight, | | 104,669 |
| Total freight mileage, or tons carried one mile, | | 219,206 |
| Average ton haul for through freight, | | 24.36 |
| Average ton haul for local freight, | | 14.43 |
| Average ton haul for all freight, | | 18.33 |
| Average amount received for each ton haul, | | $0.82 |
| Average rate per ton per mile, received for through freight, | | 02.86 |
| Average rate per ton per mile, received for local freight, | | 06.27 |
| Average rate per ton per mile, received for all freight, | | 04.49 |

*Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 413 | 3.46 |
| Flour, | 31 | 0.26 |
| Provisions (beef, pork, lard, etc.), | 81 | 0.68 |
| Animals, | 194 | 1.62 |
| Other agricultural products, | 993 | 8.30 |
| Lumber and forest products, | 5,456 | 45.63 |
| Coal, | 159 | 1.33 |
| Plaster, | 160 | 1.33 |
| Salt, | 212 | 1.77 |
| Petroleum, | 129 | 1.08 |
| Pig and bloom iron, | 13 | .11 |
| Other iron and castings, | 20 | .17 |
| Stone and brick, | 3 | .03 |

| | Tons. | Per Ct. |
|---|---|---|
| Manufactures,—articles shipped from point of production, | 332 | 2.78 |
| Merchandise and other articles not enumerated above, | 3,761 | 31.45 |
| Total tons carried, | 11,957 | 100.00 |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

United States and Adams Express Companies under their contracts with the G. R. & I. R. R. Co.

### *Transportation Companies.*

What amount have you paid other corporations, car-loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

Included in report made by Grand Rapids & Indiana Railroad Company.

### *Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Woodruff sleeping cars were run during the summer months, on which regular car mileage was paid.

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

Included in report made by G. R. & I. R. R. Co.

### *United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service.

$1,235.00 per annum for daily service each way.

### *Telegraph.*

Number of miles of telegraph owned by company, - - 26

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

None.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR.

No accidents.

STATE OF MICHIGAN, }
COUNTY OF GRAND TRAVERSE, } ss.

Perry Hannah, President, and Thos. T. Bates, Secretary, of the Traverse City Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), PERRY HANNAH, *President.*
THOS. T. BATES, *Secretary.*

Subscribed and sworn to before me, this 1st day of May, A. D. 1882.
[L. S.] LORIN ROBERTS,
*Notary Public.*

# ANNUAL REPORT

OF THE

# WABASH, ST. LOUIS & PACIFIC RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JAY GOULD, New York.
*Vice Presidents,* 1st, A. L. HOPKINS, New York.
2d, JAS, F. HOW, St. Louis.
*Secretaries,* 1st, JAS. F. HOW, St. Louis.
2d, O. D. ASHLEY, New York.
*Treasurer,* W. B. CORNEAU, St. Louis.
*General Manager,* J. C. GAULT, St. Louis.
*General Superintendents,* R. ANDREWS, Toledo.
W. F. MERRILL, Chicago.
T. McKISSOCK, St. Louis.
*Division Superintendents,* G. W. STEVENS, Ft. Wayne, Ind.
F. L. TOMPKINS, Peoria, Ill.
E. C. MURPHY, Peru, Ind.
D. G. MOORE, Cairo, Ill.
H. F. CLARK, Springfield, Ill.
A. A. HOBART, Chicago, Ill.
G. B. PARSELL, Moberly, Mo.
M. G. CARY, Kansas City, Mo.
J. W. BLANCHARD, Stanberry, Mo.
F. D. SCHERMERHORN, Quincy, Ill.
E. N. ARMSTRONG, Keokuk, Iowa.
H. B. SKEELE, Des Moines, Iowa.
B. F. MATTHIAS, Rantoul, Ill.
*Chief Engineer,* W. S. LINCOLN, St. Louis.
*Superintendent of Telegraph,* C. SELDON, St. Louis.
*Auditor,* D. B. HOWARD, St. Louis.
*General Passenger Agent,* H. C. TOWNSEND, St. Louis.
*General Freight Agent,* A. C, BIRD, St. Louis.
*Attorneys,* WAGER SWAYNE, New York.
W. H. BLODGETT, St. Louis.

## DIRECTORS.

| | |
|---|---|
| F. L. AMES, Boston, Mass, | |
| JAY GOULD, New York. | |
| RUSSELL SAGE, New York. | |
| | Term expires March, 1883. |
| SIDNEY DILLON, New York. | Term expires March, 1885. |
| B. W. LEWIS, St. Louis, Mo. | Term expires March, 1883. |
| THOS. E. TUTT, St. Louis, Mo. | |
| JAS. F. HOW, St. Louis, Mo. | |
| SAMUEL SLOAN, New York. | |
| G. G. HAVEN, New York. | |
| | Term expires March, 1884. |
| S. HUMPHREYS, New York. | |
| CHAS. RIDGELY, Springfield, Ill. | |
| JAS. F. JOY, Detroit, Mich. | |
| | Term expires March, 1885. |
| JAS. CHENEY, Ft. WAYNE, Ind. | Term expires March, 1884. |
| GEO. L. DUNLAP, Chicago, Ill. | Term expires March, 1885. |
| A. L. HOPKINS, New York. | Term expires March, 1883. |

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $14,745,035 60 |
| Total expense, including taxes, | $11,354,994 62 | |
| Net income, | | $3,390,040 98 |
| Interest on funded debt, | $3,447,627 98 | |
| Interest on unfunded debt, | 44,781 21 | |
| Rentals, | 1,009,079 52 | |
| Balance, | $1,111,447 73 | |
| Dividends declared (6 per cent), on preferred stock, | 1,329,918 50 | |
| Balance for the year,—deficit, | $2,441,366 23 | |
| Balance (profit and loss) last year (1880), | | $1,019,180 18 |
| Items not included in above, as follows: | | |
| Profit and loss, 1881, | 30,672 54 | |
| Balance forward to next year, | | $1,452,858 59 |
| | $2,472,038 77 | $2,472,038 77 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | |
| Par value of shares, | $100 00 | | |
| Amount issued, $49,954,700.00; | | | |
| No. of shares, | 499,547 | | |
| Amount paid in on common, | | $26,921,500 00 | |
| Amount paid in on preferred, | | 23,033,200 00 | |
| Total amount paid in as per books of the Company, | | | $49,954,700 00 |
| Amount paid in per mile of road owned by company, | | $15,023 97 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds Toledo & Illinois R. R., | $900,000 00 |
| First Mortgage Bonds L. E., W. & St. L. R. R., | 2,500,000 00 |
| First Mortgage Bonds Great Western, of 1859, | 2,496,000 00 |
| First Mortgage Bonds Illinois & S. Iowa R. R., | 300,000 00 |
| First Mortgage Bonds D. & E. St. Louis R. R., | 2,700,000 00 |
| First Mortgage Bonds Quincy & Toledo R. R., | 500,000 00 |
| First Mortgage Bonds Great Western, west of Decatur. | 3,000 00 |
| Second Mortgage Bonds Toledo & Wabash R. R.. | 1,000,000 00 |
| Second Mortgage Bonds Wabash & Western R. R., | 1,500,000 00 |
| Second Mortgage Bonds Great Western R. R., of 1859, | 2,500,000 00 |
| Consolidated Sinking Fund Bonds T. W. & W. R. R., | 2,610,000 00 |
| Wabash Railway Funded Debt Bonds, 7 per cent., | 527,500 00 |
| Wabash Railway Funded Debt Bonds, graduated, | 1,341,500 00 |
| Wabash Railway 7s of 1879, | 1,600,000 00 |
| Mortgage Notes, second series, | 49,000 00 |
| Mortgage notes, third series, | 360,000 00 |
| Graduated Scrip Certificates, | 541,560 50 |
| Seven per cent Scrip Certificates, from August 1st, 1877, | 116,585 00 |
| Seven per cent Scrip Certificates, from February 1st, 1877, | 413,212 77 |
| Rolling Stock Certificates, | 33,000 00 |
| First Mortgage Bonds Hannibal & Naples R. R,, | 500,000 00 |
| First Mortgage Bonds C. H. & W. R. R., | 157,200 00 |
| First Mortgage Bonds Chicago Division, | 4,500,000 00 |
| First Mortgage Bonds H. R. & W. R. R., | 300,000 00 |
| First Mortgage Bonds Detroit Division, | 2,052,000 00 |
| First Mortgage Bonds Indianapolis Division, | 2,000,000 00 |
| First Mortgage Bonds Cairo Division, | 3,857,000 00 |
| First Mortgage Bonds Indiana, Peru & C. R. R., | 275,000 00 |
| First Mortgage Bonds Chicago, Cincinnati & Louisville, | 1,000,000 00 |
| First Mortgage Bonds North Missouri, | 6,000,000 00 |
| First Mortgage Bonds Omaha Division, | 2,350,000 00 |
| First Mortgage Bonds Clarinda Branch, | 264,000 00 |
| First Mortgage Bonds Iowa Division, | 2,300,000 00 |
| First Mortgage Bonds Cent'le Morana & Albia R. R., | 400,000 00 |

| | |
|---|---|
| Real Estate and Railway Mortgage Bonds St. L., K. C. & N. R. R. | $3,000,000 00 |
| First Mortgage Bonds St. Charles Bridge, | 1,000,000 00 |
| Second Mortgage Bonds St. Charles Bridge, | 388,500 00 |
| Real Estate Notes, | 73,000 00 |
| General Mortgage Bonds, | 9,000 00 |
| Total amount of funded debt, | $66,291,858 27 |

FLOATING DEBT.

| | |
|---|---|
| Other debts,—current credit balances, etc., | $1,092,088 51 |
| Total debt liabilities, | $72,383,946 78 |
| Amount of debt liabilities per mile of road [3,325 miles], | $21,769 61 |
| Amount of liabilities, after deducting all assets not representing permanent investments, | $120,690,539 77 |

COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, and appurtenances, | $119,237,681 17 |
| Average cost of same per mile, | 35,863 96 |
| Proportion of cost of road and equipment for Michigan, | 2,807,430 79 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Land, land damages and fences, | $132,885 59 |
| Passenger and freight stations, wood-sheds, and water stations, | 162,843 21 |
| New locomotives, | 19,056 71 |
| New passenger cars, | 39,644 76 |
| New mail and baggage cars, | 14,439 27 |
| New freight cars, | 847,020 74 |
| Machine-shops, machinery and tools, and engine houses, | 167,202 99 |
| Any other expenditures charged to property account (specifying the same): | |
| Bridging and superstructure, including rails, | 880,481 71 |
| Grading and masonry, | 287,717 71 |
| Engineering, agencies, salaries, etc., during construction, | 24,481 48 |
| Stock and bonds issued and indebtedness assumed and incurred by reason of construction of new lines and purchase of other roads, | 32,737,454 94 |
| Total charges to property account during the year, | $35,313,729 11 |
| Net addition to property account for the year, | $35,313,729 11 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, PASSENGER.

| | | |
|---|---|---|
| From local passengers, | $3,067,989 12 | |
| From through passengers, | | |
| From express and baggage, | 343,236 07 | |
| From mails, | 298,384 56 | |
| From other sources, passenger department, | 72,527 26 | |
| Total earnings, passenger department, | | $3,782,137 01 |
| Earnings per train mile run [4,115,329 miles], | $0 92 | |

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $10,667,906 90 | |
| From through traffic, | | |
| From other sources, freight department, | 17,745 92 | |
| Total earnings, freight department, | | $10,685,652 82 |
| Earnings per train mile run [8,368,303 miles], | $1 28 | |
| Total transportation earnings, | | $14,467,789 83 |
| Earnings per mile of road operated [3,325 average miles], | $4,351 21 | |
| Earnings per train mile run, from all trains earning revenue [12,483,632 miles], | $1 16 | |
| *Proportion of earnings for Michigan, | $75,798 88 | |
| Rents for use of road, stations, etc., | | 27,481 80 |
| Income from all other sources, | | 249,763 97 |
| As follows: | | |
| Burlington & S. W. R., use of track Moulton to Bloomfield, | 12,000 00 | |
| Chicago, Pekin & S. W. R. R., use of track Eureka to Pekin Junction, | 8,850 00 | |
| Illinois Midland R. R. use of track Peoria to Farmdale, | 6,631 80 | |
| Dividends on T. P. & W. Preferred Income Bonds, | 70,469 99 | |
| Dividends on miscellaneous securities, | 10,113 43 | |
| Sundry Pool Earnings, | 169,180 55 | |
| Total income from all sources for year 1881, | | $14,745,035 60 |
| *Proportion of income for Michigan, | | $75,798 88 |

* This amount as returned by the company represents the pro rata earnings from September 1 to December 31, 1881, of the Michigan mileage of the Detroit, Butler & St. Louis R. R. only. If computed on the proportionate mileage to the whole Wabash system, the proportion of earnings for Michigan would be $143,825.40, and proportion of income for Michigan, $145,780.06.—*Com. of R. R.*

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $1,614,419 73 |
| Renewal of rails, | 343,115 71 |
| Renewal of ties, | 420,396 35 |
| Repairs of bridges, including culverts and cattle guards, | 354,141 15 |
| Repairs of fences, road crossings, and signs, | 67,655 11 |
| Repairs of buildings, | 238,616 41 |
| Total, | $3,038,344 46 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $688,438 88 |
| Repairs of passenger cars, | 202,420 06 |
| Repairs of freight cars, | 577,782 05 |
| Total, | $1,468,640 99 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $912,146 46 |
| Water-supply, | 108,572 92 |
| Oil and waste, | 166,778 04 |
| Locomotive service, | 1,079,145 37 |
| Passenger train service, | 243,115 62 |
| Passenger train supplies, | 62,085 17 |
| Mileage of passenger cars (debit balance), | 54,746 12 |
| Freight train service, | 656,204 04 |
| Freight train supplies, | 82,148 37 |
| Mileage of freight cars (debit balance), | 119,297 15 |
| Telegraph expenses (maintenance and operating), | 208,318 80 |
| Damage and loss of freight and baggage, | 66,672 75 |
| Damages to property and cattle, | 114,399 59 |
| Personal injuries, | 86,317 87 |
| Agents and station service, | 754,983 84 |
| Station supplies, | 61,842 99 |
| Total, | $4,776,775 10 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of the general officers of the company, | $122,697 50 |
| Salaries of clerks in general offices, | 162,645 52 |
| Law expenses, | 88,838 08 |
| Insurance, | 17,645 32 |
| Stationery and printing, | 164,857 85 |
| Outside agencies and advertising, | 240,138 17 |
| Contingencies, and not otherwise distributed herein, | 712,360 67 |
| Taxes in Michigan, None yet levied or paid. | |
| Taxes in other States, | 378,218 92 |
| Total, | $1,887,402 03 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $3,038,344 46 |
| Maintenance of motive power and cars, | 1,468,640 99 |
| Conducting transportation, | 4,776,775 10 |
| General expenses, including taxes, | 1,887,402 03 |
| Total operating expenses and taxes, | $11,171,162 58 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road operated, 3,325 miles, | | $3,359 75 |
| Operating expenses and taxes per train mile run, for trains earning revenue [12,483,632 miles], | | $0 89 |
| Proportion of operating expenses and taxes for Michigan, | | $87,667 08 |
| Per centage of expenses to earnings, | 77.2 | |
| Net earnings per mile of road operated, | | $991 46 |
| Net earnings per train mile, | | 0 26 |

## ASSETS AND LIABILITIES.

ASSETS.

| | | |
|---|---|---|
| Construction account, Equipment " | $107,658,815 38 | |
| Other investments (specifying same): | | |
| Expenditures for construction and equipment, Jan. 1st, 1880, to Dec. 31st, 1881, | 11,578,865 79 | |
| | | $119,237,681 17 |
| Cash items: | | |
| Sundry securities on hand, | | $435,861 52 |
| Due from agents and companies, | See contra. | |
| Other assets: | | |
| Materials and supples, | | 1,212,245 50 |
| Income account, | | 1,452,858 59 |
| Total assets, | | $122,338,646 78 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | $49,954,700 00 | |
| Funded debt, | 66,291,858 27 | |
| | | $116,246,558 27 |
| Unfunded debt: | | |
| Notes payable, | $1,855,465 92 | |
| Vouchers and accounts, net liabilities, | 4,236,622 59 | |
| Profit and loss, or income accounts, | | 6,092,088 51 |
| Total liabilities, | | $122,338,646 78 |

## DESCRIPTION OF ROAD.

### MILES OF ROAD OPERATED DECEMBER 31, 188.

*Lines East of the Mississippi River.*

| | Miles. | 10ths. | Miles. | 10ths |
|---|---|---|---|---|
| Toledo, Ohio to East St. Louis, Ill., | 435 | 7 | | |
| Decatur, Ill., to Camp Point, Ill., | 129 | 2 | | |
| Camp Point, Ill., to Quincy, Ill., | 22 | 8 | | |
| Bluff, Ill., to East Hannibal, Ill., | 49 | 9 | | |
| Maysville, Ill., to Pittsfield, Ill., | 6 | 2 | | |
| Clayton, Ill., to Evanston, Ill., | 34 | 5 | | |
| Edwardsville, Ill., to Edwardsville Crossing, Ill., | 10 | 2 | | |
| Detroit, Mich., to Logansport, Ind., | 213 | 8 | | |
| Michigan City, Ind., to Indianapolis, Ind., | 161 | 0 | | |
| Attica City, Ind., to Covington, Ind., | 14 | 5 | | |
| West Lebanon, Ind., to Leroy, Ill., | 75 | 7 | | |
| P. & D. Junction, Ill., to St. Francisville, Ill., | 109 | 3 | | |
| Vincennes, Ill., to Cairo, Ill., | 158 | 0 | | |
| Hollis, Ill., to Jacksonville, Ill., | 75 | 3 | | |
| Springfield, Ill., to Havana, Ill,, | 47 | 2 | | |
| Streator, Ill., to Altamont, Ill., | 156 | 5 | | |
| Shumway, Ill, to Effingham, Ill., | 8 | 5 | | |
| Strawn, Ill., to Chicago, Ill., | 99 | 7 | | |
| Urbana, Ill., to Havana, Ill., | 102 | 2 | | |
| White Heath, Ill., to Decatur, | 29 | 7 | | |
| State Line, Ill., Keokuk, Iowa, | 223 | 7 | | |
| Hamilton, Ill., to Warsaw, Ill., | 5 | 0 | | |
| La Harpe, Ill., to Burlington, Iowa, | 19 | 7 | | |
| | | | 2,188 | 3 |

*Lines West of Mississippi River.*

| | | | | |
|---|---|---|---|---|
| St. Louis Union depot to Kansas City, Mo., | 276 | 8 | | |
| St. Louis Levee to Ferguson, Mo., | 10 | 4 | | |
| Centralia, Mo., to Columbia, Mo., | 21 | 8 | | |
| Glasgow, to Salisbury, Mo., | 15 | 9 | | |
| Moberly to State Line, Mo., | 87 | 7 | | |
| Brunswick to State Line, Mo., | 157 | 8 | | |
| N. Lexington, to St. Joseph, Mo., | 77 | 1 | | |
| W. Quincy, to Trenton, Mo., | 135 | 9 | | |
| State Line to Ottumwa, Iowa, | 43 | 3 | | |
| State Line to Council Bluffs, Iowa, | 66 | 6 | | |
| Roseberry, to State Line, | 10 | 1 | | |
| State Line to Clarinda, Iowa, | 11 | 4 | | |
| Keokuk, Iowa, to Humeston, Iowa, | 131 | 0 | | |
| elay to Albia, Iowa, | 24 | 0 | | |
| es Moines to Jefferson, Iowa, | 66 | 9 | | |
| | | | 1,136 | 7 |
| | | | 8,325 | 0 |

* 68 miles in Missouri.

*In Michigan.*

Date when the road or portions thereof were opened for public use in Michigan: From Butler, Ind., to Detroit, Mich., August 15th, 1881.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 78 28 | |
| Length completed in Indiana, Illinois, Iowa, and Missouri, as per preceding list, | 3,246 72 | |
| Total length completed, | | 3,325 00 |
| Total length of road belonging to this company (see list), | | 3,325 00 |
| Total length of road belonging to this company in Michigan, | 78 28 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated. | | Not reported. |
| Same in Michigan, | 9 85 | |
| Aggregate length of tracks belonging to this company computed as single track, | | |
| Same in Michigan, | 88 13 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 59 lbs., | | 80 72 |
| Total length of tracks laid with iron rails, weight per yard, 56 lbs. | | 7 41 |

*Roads Belonging to other Companies, Operated by this Company, under Lease or Contract.*

| | | |
|---|---|---|
| Name, description, and length of each in Michigan: D., G. H. and M. (G. T. Junction to Detroit), monthly rental, | 8 20 | |
| Total length of above roads, | | 8 20 |
| Total length of above roads in Michigan, | 8 20 | |
| Total miles of road operated by this company, | | 3,325 00 |
| Total miles of road operated by this company in Michigan, | 78 28 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Combination bridges, number of, | 5; aggregate length, feet, | 486 |
| Wooden trestles, number of, | 29; aggregate length, feet, | 3,823 |
| Total, | 34 | 4,309 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 143 |
| Tile, number, | 46 |

*Cattle Guards.*

| | |
|---|---|
| Number of cattle guards in Michigan, | 249 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
L. S. & M. S. R. R., at Payneston.
L. S. & M. S. R. R., at Adrian.
L. S. & M. S. R. R., at Jackson's.
Michigan Central R. R., at Detroit Junction.
F. & P. M. R. R., at Romulus.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 117 |
| Number of crossings of highways over railroad, in Michigan, | None. |
| Number of crossings of highways under railroad, in Michigan, | 1 |
| Number of highway bridges 18 feet above track, | None. |
| Number of highway bridges less than 18 feet above track, | None. |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 758 |
| Same in Michigan, | 14 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 13,288 |
| Same in Michigan, | |

*Fencing.*

| | |
|---|---|
| How many miles of fencing have you on your road in Michigan? | 77.6 |
| What is the average cost per rod? | $1 00 |
| The total cost of same? | $49,920 00 |
| How many miles of new fencing have you built during the year? | All above. |
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road, | None. |

REPAIRS AND RENEWALS.

*Road Bed and Track—in Michigan.*

| | |
|---|---|
| Number of track sections in Michigan, | 15 |
| Average length of sections, miles, | 5 |
| Average number of men in each section gang, | 4 |

## ROLLING STOCK.

### *Whole Road.*

| | |
|---|---|
| Number of locomotives of more than 30 tons weight, exclusive of tender, | 536 |
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 40 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 10 |
| Number of passenger cars—12-wheel, | 52 |
| Number of passenger cars—8-wheel, | 178 |
| Number of express and baggage cars (includes mail), | 137 |
| Number of box freight cars, | 14,239 |
| Number of stock cars, | 2,304 |
| Number of platform cars, | 5,274 |
| Number of conductors' way cars, | 325 |
| Number of locomotives equipped with train-brake, | 138 |
| Number of cars used in passenger trains equipped with train-brake, | 363 |
| What kind of train-brake is in use on your road? | Westinghouse. |
| Number of passenger train cars with Miller platform and buffer, | All. |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage—whole Road.*

| | |
|---|---|
| Miles run by passenger trains during the year, | 4,115,329 |
| Miles run by freight trains during the year, | 8,368,303 |
| Total mileage of trains earning revenue, | 12,483,632 |
| Miles run by work trains during the year, / Miles run by switching trains, | 3,033,810 |
| Total train mileage, | 15,517,442 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in passenger trains, including baggage cars, | 6 |
| Average weight of passenger trains, exclusive of passengers,—tons, | 180 |
| Average number of cars in freight trains, | 25 |
| Average weight of freight trains, exclusive of freight,—tons, | 310 |

*Passenger Traffic—whole Road.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Total number of passengers carried, | 3,215,200 | | |
| Total passenger mileage, or passengers carried one mile, | | 137,114,727 | |
| Average distance traveled by each passenger, | | 42.5 | |
| Average amount received from each passenger, | | | $0.95.4 |
| Highest rate of fare per mile, for any distance, | | | 0.03 |
| Lowest rate of fare per mile, for any distance, | | | 0.01.50 |
| Average rate of fare per mile, for through passengers, | | | 0.02 |
| Average rate of fare per mile, for local passengers, | | | 0.02.75 |
| Average rate of fare per mile, for all passengers, | | | 0.02.24 |

*Freight Traffic.*

| | | |
|---|---|---|
| Number of tons of local freight carried, | 5,393,917 | |
| Total tons of freight carried, | 5,393,917 | |
| Total freight mileage, or tons carried one mile, | | 1,149,774,547 |
| Average ton haul for all freight, | | 213 |
| Average amount received for each ton haul, | | 1.98.75 |
| Average rate per ton per mile, received for all freight, | | 0.93 |

*Tonnage of Articles Transported—whole Road.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain, | 1,494,400 | 27.7 |
| Flour, | 116,144 | 2.2 |
| Provisions (beef, pork, lard, etc.), | 82,958 | 1.5 |
| Animals, | 399,883 | 7.4 |
| Other agricultural products, | 116,701 | 2.2 |
| Lumber and forest products, | 845,593 | 15.7 |
| Coal, | 701,439 | 13.0 |
| Cotton, | 80.337 | 1.4 |
| Salt, | 71,773 | 1.3 |
| Petroleum, | 31,227 | .5 |
| Railroad iron,—iron and steel rails, | 190,273 | 3.7 |
| Pig and bloom iron, | 46,093 | .9 |
| Other iron and castings, | 83,434 | 1.6 |
| Ores, | 27,395 | .4 |
| Stone, brick, cement, etc., | 114,756 | 2.0 |
| Manufactures,—articles shipped from point of production, | 150,533 | 2.8 |
| Merchandise and other articles not enumerated above, | 840,978 | 15.6 |
| Total tons carried, | 5,393,917 | 100.00 |

## ADDITIONAL QUESTIONS.

### *Express Companies.*

What express companies run on your road, and on what terms, and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Pacific, American, Adams, and United States.

### *Transportation Companies.*

What freight and transportation companies run on your road, and on what terms and on what conditions as to rates, use of track, machinery, repairs of cars, etc.; do they use the cars of your company, or those furnished by themselves, and are their cars or their freight given any preference in speed, or order of transportation, and if so, in what particular?

Red Line, Buffalo, N. Y., proportion of through rate.
Canada Southern, Buffalo, N. Y., proportion of through rate.
Erie & North Shore, Detroit, Mich., proportion of through rate.
Hoosac Tunnel, Rochester, N. Y., proportion of through rate.
South Shore, Cleveland, Ohio, proportion of through rate.
Wabash & Erie Dispatch, Detroit, Mich., proportion of through rate.
Merchants' Dispatch, New York, proportion of through rate.
Star Union, Pittsburg, Pa., proportion of through rate.
Green Line, Louisville, Ky., proportion of through rate.
Continental, Cincinnati, Ohio, proportion of through rate.

What amount have you paid other corporations, car loaning companies [stock companies], or individuals, *not operating railroads*, for the use of cars, stating name of individuals or company, place of location of general office of said company, and amount paid to each?

| | |
|---|---|
| Pullman Palace Car Co., Chicago, Ill., | $49,541 90 |
| American Refrigerator Transportation Company, St. Louis, Mo., | 3,740 94 |
| Ames Coal & Transportation Company, Chicago, Ill., | 2,751 64 |
| C. C. Comstock, St. Joseph, Mich., | 584 88 |
| Commercial Express Line, Chicago, Ill., | 755 40 |
| Samuel Cupples & Co., St. Louis, Mo., | 276 17 |
| Empire Line, Philadelphia, Pa, | 2,233 28 |
| Erie & Chicago Car Company, Philadelphia, Pa., | 4,037 25 |
| Erie & Pacific Despatch, Indianapolis, Ind., | 1,142 23 |
| John Hurd, Bridgeport, Conn., | 34,257 49 |
| John Hilt & Co., Indianapolis, Ind., | 1,016 93 |
| J. F. Joy & Wm. J. Rotch, Detroit, Mich., | 37,751 36 |
| T. D. Kingan, Indianapolis, Ind., | 475 86 |
| Merchants' Despatch Transportion Co., New York. | 19,853 68 |
| Michigan Car Co., Detroit, Mich., | 4,450 73 |
| Marshall Car Company, Bridgeport Conn., | 28,055 06 |
| Red Line Transit Co., Buffalo, N. Y., | 8,476 65 |
| St. Louis Car Loaning Company, St. Louis, Mo., | 6,151 44 |
| Standard Oil Co., Cleveland, O., | 2,198 93 |
| Union Line, Pittsburg, Pa., | 11,987 67 |
| U. S. Express Co., New York, | 521 75 |
| Vermillion Coal Company, Chicago, Ill,, | 360 51 |

| | |
|---|---|
| White Line Transit Company, Buffalo, N. Y., | $2,324 57 |
| Wabash & Erie Despatch, Detroit, Mich., | 3,631 53 |
| St. Louis Refrigerator Co., St. Louis, Mo., | 716 82 |
| Other corporations, small amounts, | 2,273 85 |
| Total, | $229,568 51 |

*Sleeping Cars.*

Do sleeping, parlor, or dining-room cars run on your road, and if so, on what terms are they run, by whom are they owned, and what charges are made in addition to regular passenger rates?

Pullman Sleeping Cars.

Dining cars owned by W. St. L. & P. R'y Co.,

What is the total amount paid by your company to palace or sleeping car companies, to what companies, and the amount paid to each?

*United States Mail.*

What is the compensation paid you by the U. S. Government for the transportation of its mails, and on what terms of service?

$298,384.56 for year on all lines and branches.

*Telegraph.*

Number of miles of telegraph owned by company, . . . None.

What other company, if any, owns a line of telegraph on your right of way, and how many miles does each own?

| | |
|---|---|
| Western Union, on all lines, | 12,504.9 |
| Same in Michigan, | 183.6 |
| American Telegraph Company Butler to Logansport, Ind., | 93.0 |

REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

None in 1881.

TABULAR STATEMENT OF ACCIDENTS.

*In Michigan.*

None.

STATE OF MISSOURI, }
CITY OF ST. LOUIS, } ss.

James V. How, 3d Vice President and Secretary of the Wabash, St. Louis & Pacific Railway Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of his knowledge and belief.

[L. S. OF R. R.] (Signed), JAMES F. HOW,
*3d Vice President and Secretary W. St. L. & P. R'y Co.*

Subscribed and sworn to before me, this 1st day of May, A. D. 1882 (my commission expires June 29th, 1885).

[L. S.] GEO. S. GROVER,
*Notary Public, City of St. Louis, State of Missouri.*

# ORE AND FOREST ROADS.

# ANNUAL REPORT

OF THE

# BUCKLEY & DOUGLAS RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President and General Manager,* EDWARD BUCKLEY, Manistee, Mich.
*Secretary and Treasurer,* CHARLES G. WILSON, Manistee, Mich.

## DIRECTORS.

| | |
|---|---|
| EDWARD BUCKLEY, Manistee, Mich. | Term expires June 1st, 1887. |
| WILLIAM DOUGLAS, Manistee, Mich. | Term expires June 1st, 1886. |
| CHARLES G. WILSON, Manistee, Mich. | Term expires June 1st, 1885. |
| MARY D. BUCKLEY, Manistee, Mich. | Term expires June 1st, 1884. |
| EMELINE D. RUGGLES, Manistee, Mich. | Term expires June 1st, 1883. |

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 7 |
| Number of stockholders in Michigan at same date, | 7 |
| Amount of full-paid stock held in Michigan at same date, | $13,100 00 |

Date of annual meeting of stockholders,—January 1st.
Fiscal year of company ends January 1st.
General offices of the company are located at Manistee, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $5,371 70 |
| Total expense, including taxes, | $2,635 91 | |
| Net income, | | $2,735 79 |
| Interest on funded debt, | $1,238 36 | |
| Balance for the year, | | $1,497 43 |
| Balance forward to next year, | $1,497 43 | |
| | $1,497 43 | $1,497 43 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $40,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $13,100.00; No. of shares, | | 131 | |
| Amount paid in on common, | | $500 00 | |
| Total amount paid in as per books of the company, | | | $500 00 |
| Amount paid in per mile of road owned by company, 8 miles, | | $62 50 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FUNDED DEBT.

| | |
|---|---|
| First Mortgage Bonds (due in six semi-annual installments, the first payable January 1, 1882, interest 10 per cent, payable semi-annually), | $40,000 00 |
| Total amount of funded debt, | $40,000 00 |
| Total debt liabilities, | $40,000 00 |
| Amount of debt liabilities per mile of road [8 miles], | $5,000 00 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $31,807 79 |
| Average cost of construction per mile of road (not including sidings), [8 miles], | 3,975 97 |
| Proportion of cost of construction for Michigan, | 31,807 79 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $5,088 30 |
| Loggers, | 6,086 89 |
| Machinery and tools, etc., | 2,635 91 |
| Total for equipment, | $13,811 10 |
| Average cost of equipment per mile of road operated by company [8 miles], | $1,726 39 |
| Proportion of cost of equipment for Michigan, | 13,811 10 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $45,618 89 |
| Average cost of same per mile, | 5,702 36 |
| Proportion of cost of road and equipment for Michigan, | 45,618 89 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $5,371 70 | |
| Total earnings, freight department, | | $5,371 70 |
| Earnings per train mile run [8,300 miles], | $0 64.72 | |
| Total transportation earnings, | | $5,371 70 |
| Earnings per mile of road operated [8 miles], | $671 46 | |
| Earnings per train mile run, from all trains earning revenue [8,300 miles], | $0 64.72 | |
| Proportion of earnings for Michigan, | $5,371 70 | |
| Total income from all sources, | | $5,371 70 |
| Proportion of income for Michigan, | $5,371 70 | |

### EXPENSES.

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $304 30 |
| Repairs of freight cars, | 84 11 |
| Total, | $388 41 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $35 34 |
| Oil and waste, | 134 62 |
| Locomotive service, | 883 61 |
| Freight train service, | 1,193 93 |
| Total, | $2,247 50 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of motive power and cars, | $388 41 |
| Conducting transportation, | 2,247 50 |
| Total operating expenses and taxes, | $2,635 91 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 8 miles, | $329 49 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [8,300 miles], | $0 43.81 | |
| Proportion of operating expenses and taxes for Michigan, | $2,635 91 | |
| Per centage of expenses to earnings, | 49 | |
| Net earnings per mile of road, | $341 97 | |
| Net earnings per train mile, | $0 33 | |

## ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $31,807 79 |
| Equipment account, | 13,811 10 |
| Cash items: | |
| Cash, | 500 00 |
| Total assets, | $46,118 89 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $500 00 |
| Funded debt, | 40,000 00 |
| Unfunded debt: | |
| Vouchers and accounts, | 4,121 46 |
| Profit and loss, or income accounts, | 1,497 43 |
| Total liabilities, | $46,118 89 |

## DESCRIPTION OF ROAD.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 8 00 | |
| Total length completed, | | 8 00 |
| Total length of road belonging to this company, | | 8 00 |
| Total length of road belonging to this company in Michigan, | 8 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 50 |

| | | |
|---|---|---|
| Same in Michigan, | 50 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 8 50 |
| Same in Michigan, | 8 50 | |
| Gauge of track, 3 feet, 6 inches. | | |
| Total length of tracks laid with iron rails, weight per yard, 30 lbs., | | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, number of, | 2; aggregate length, feet, | 325 |
| Total, | 2 | 325 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 1 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 6 |
| Same in Michigan, | 6 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 1 |

STATE OF MICHIGAN, }
COUNTY OF MANISTEE, } ss.

Edward Buckley, President, and Charles G. Wilson, Secretary of the Buckley & Douglas Railroad Company, being duly sworn, depose, and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed) EDWARD BUCKLEY,
CHARLES G. WILSON,

Subscribed and sworn to before me, this 28th day of June, A. D. 1882.

[L. S.] CHAS. H. HODSKIN,
*Notary Public for Manistee County.*

# ANNUAL REPORT

OF THE

# HECLA & TORCH LAKE RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

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## GENERAL REMARKS.

Locomotives are housed in a building recently erected by the "Calumet & Hecla Mining Company." The depot buildings necessary to the working of the railroad are furnished by the "Calumet & Hecla Mining Company." This road operates an incline ⅞ of a mile in length, and in connection uses a tug and scows furnished by the "Calumet & Hecla Mining Company." Said company also pay the expenses incurred by operating said railroad, when said expenses are in excess of receipts, for the privilege of having its copper rock transported to its stamp mills at Torch Lake.

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* ALEXANDER AGASSIZ, Boston, Mass.
*Secretary,* BETHUEL PENNIMAN, Calumet, Mich.
*Treasurer,* CHAS. W. SEABURY, Boston, Mass.
*General Manager,* WILL. A. CHILDS, Calumet, Mich.
*Chief Engineer,* L. S. WOODBURY, Calumet, Mich.

## DIRECTORS.

ALEXANDER AGASSIZ, Cambridge, Mass.
QUINCY A. SHAW, West Roxbury, Mass.
H. L. HIGGINSON, Boston, Mass.
A. W. CHANDLER, Boston, Mass.
BENJ. G. GAY, Boston, Mass.
CHAS. W. SEABURY, Boston, Mass.
JAMES N. WRIGHT, Calumet, Mich.

Term expires June 21st, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 8 |
| Number of stockholders in Michigan at same date, | 1 |
| Amount of full-paid stock held in Michigan at same date, | $100 00 |

Date of annual meeting of stockholders, 3d Wednesday in June.
Fiscal year of company ends April 30th.
General offices of the company are located at Calumet, Mich.

## GENERAL EXHIBIT.

| | DEBIT. | CREDIT. |
|---|---|---|
| Total income, | | $46,748 16 |
| Total expense, including taxes, | $69,017 31 | |
| Net deficit, | $22,269 15 | |
| Balance for the year, | $22,269 15 | |
| Balance (profit and loss) last year, | 11,688 11 | |
| Balance forward to next year, | | 33,957 26 |
| | $33,957 26 | $33,957 26 |

Amount of deficiency paid by the Calumet & Hecla Mining Company. See "General Remarks."

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $150,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued ———; No. shares, | $1,000 | | |
| Amount paid in on common, | | All. | |
| Amount paid in on preferred, | | None. | |
| Amount paid in on shares not issued (number —), | | None. | |
| Total amount paid in as per books of the company, | | | $100,000 00 |
| Amount realized in cash, | | $100,000 00 | |
| Amount paid in per mile of road owned by company, 4 miles, | | | 25,000 00 |

## ANALYSIS OF DEBT ACCOUNTS.

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for construction, | | $87,560 93 |
| Total debt liabilities, | | $87,560 93 |
| Amount of debt liabilities per mile of road [4 miles], | $21,890 23 | |
| Amount of liabilities, after deducting all assets not representing permanent investments, | | $87,560 93 |
| Contingent liabilities as follows: None. | | |

### COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total cost of road and equipment, | $187,560 93 |
| Average cost of same per mile, | 46,890 23 |
| Proportion of cost of road and equipment for Michigan, | 187,560 93 |

### CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| New freight cars, | $2,000 00 |
| Total charges to property account during the year, | $2,000 00 |
| Net addition to property account for the year, | 2,000 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From through traffic, | $ 46,748 16 | |
| Total earnings freight department, | | $46,748 16 |
| Earnings per train mile run [27,000 miles], | $1 73.14 | |
| Earnings per mile of road operated [4 miles], | $11,687 04 | |
| Earnings per train mile run, from all trains earning revenue [27,000 miles], | $1 73.14 | |
| Proportion of earnings for Michigan, | $56,748 16 | |
| Total income from all sources, | | $46,748 16 |
| Proportion of income for Michigan, | $46,748 16 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | |
| Renewal of rails, | |
| Renewal of ties, | |
| Repairs of bridges, including culverts and cattle guards. | |
| Repairs of fences, road crossings, and signs, | |
| Repairs of buildings, | $10,907 79 |
| Total, | $10,907 79 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

Included in class 3.

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Oil and waste, and fuel, | $11,225 26 |
| Agents and station service, station supplies, and all other expenses, | 45,526 67 |
| Total, | $56,751 93 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Contingencies, | $1,357 59 |
| Total, | $1,357 59 |

RECAPITULATION OF EXPENSES.

| | | |
|---|---|---|
| Maintenance of way and buildings, | | $10,907 79 |
| Conducting transportation, | | 56,751 93 |
| General expenses, including taxes, | | 1,357 59 |
| Total operating expenses and taxes, | | $69,017 31 |
| Operating expenses and taxes per mile of road, | 17,254 32 | |
| Operating expenses and taxes per train mile run, for trains earning revenue [27,000 miles), | $2 55 | |
| Proportion of operating expenses and taxes for Michigan, | $69,017 31 | |
| Per centage of expenses to earnings, 126 | | |
| Net deficit per mile of road, | $5,567 28 | |
| Net deficit per train mile, | $0 81.86 | |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | |
| Equipment account, | $187,560 93 |
| Total assets, | $187,560 93 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $100,000 00 |
| Unfunded debt: | |
| Vouchers and accounts, | $87,560 93 |
| Total liabilities, | $187,560 93 |

## DESCRIPTION OF ROAD.

MAIN LINE.

Date when the road or portions thereof were opened for public use:
Hecla Mine to Torch Lake Incline, October, 1868.

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 4 00 | |
| Total length completed, | | 4 00 |

BRANCHES.

| | | |
|---|---|---|
| Calumet Branch, from Hecla to Calumet Branch, | | 50 |
| Total length of branches owned by company, | | 50 |
| Total length of branches owned by company in Michigan, | 50 | |
| Total length of road belonging to this company, | | 4 50 |
| Total length of road belonging to this company in Michigan, | 4 50 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 50 |
| Same in Michigan, | 50 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 5 00 |
| Same in Michigan, | 5 00 | |
| Gauge of track, 4 feet, 1 inch. | | |
| Total length of track laid with steel rails, weight per yard, 46 lbs., | | 4 75 |
| Total length of tracks laid with iron rails, weight per yard, 45 lbs., | | 25 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, number of, | 1; aggregate length, feet, | 300 |
| Total, | 1 | 300 |

*Culverts in Michigan.*

| | |
|---|---|
| Timber, number, | 1 |
| Stone, number, | 1 |

*Cattle Guards.*

Number of cattle guards in Michigan, . . . . . 4

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Mineral Range R. R., at Calumet.
Number of crossings of highways at grade in this State without protection, . . . . . 4
Have safety-guards been erected at over-head obstructions?
No obstructions.

*Stations.*

Number of stations on whole line, . . . . . 2
Same in Michigan, . . . . . 2

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials, . . . . . 45
Same in Michigan, . . . . . 45

*Fencing.*

How many miles of fencing have you on your road in Michigan?
None but snow.
What is the average cost per rod? . . Not known.
How many miles of new fencing have you built during the year? None.
Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road, . . None.

REPAIRS AND RENEWALS.

*Road Bed and Track.*

Number of track sections in Michigan, . . . . 1
Average length of sections,—miles, . . . . . 4.50
Average number of men in each section gang, . . . 6
Number of new ties put in whole line during the year, . . 3,000
Number of new ties put in track in Michigan, . . . 3,000
Average number of new ties per mile of road, . . . 600
New rails put in track:
Steel [tons 20] miles, . . . . . 00.25
Total miles of track laid with new rails, . . . 00.25
Between what points were new rails laid:
On siding.

ROLLING STOCK.

Number of locomotives of more than 20 tons weight, exclusive of tender, . . . . . 4
Number of locomotives of more than 10 tons weight, exclusive of tender, . . . . . 1

| | |
|---|---|
| Number of passenger cars—8-wheel, | 1 |
| Number of box freight cars, | 4 |
| Number of platform cars, | 24 |
| Number of ore cars, | 133 |
| Other cars as follows: | |
| Timber and stone cars, 8-wheel, | 4 |
| Number of locomotives equipped with train-brake, | None. |
| Number of cars used in passenger trains equipped with train-brake, | None. |
| What kind of train-brake is in use on your road? | None. |
| Number of passenger train cars with Miller platform and buffer, | None. |

## MILEAGE, TRAFFIC, ETC.

### *Train Mileage.*

| | |
|---|---|
| Miles run by freight trains during the year, | 27,000 |
| Total mileage of trains earning revenue, | 27,000 |
| Total train mileage, | 27,000 |

### *Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in freight trains, | 30 |
| Average weight of freight trains, exclusive of freight,—tons, | 90 |

### *Freight Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of tons of through freight carried, | 388,309 | | |
| Total tons of freight carried, | 388,309 | | |
| Total freight mileage, or tons carried one mile, | | 1,553,236 | |
| Average amount received for each ton haul, | | | 1.20 |
| Average rate per ton per mile, received for all freight, | | | 0.03.01 |

### *Tonnage of Articles Transported.*

| | Tons. | Per Ct. |
|---|---|---|
| Grain and hay, | 400 | 1.03 |
| Lumber and forest products, | 15,753 | 4.06 |
| Coal, | 15,000 | 4.05 |
| Plaster, | 150 | .39 |
| Copper and mineral, | 10,000 | 2.70 |
| Railroad iron,—iron and steel rails, | 20 | 0.05 |
| Other iron and castings, | 1,500 | .40 |
| Ores, | 340,080 | 85.91 |
| Stone and brick, | 3,406 | .87 |
| Merchandise and other articles not enumerated above, | 2,000 | .54 |
| Total tons carried, | 388,309 | 100.00 |

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

No accidents.

STATE OF MICHIGAN, }
COUNTY OF HOUGHTON, } ss.

James N. Wright, director, and Bethuel Penniman, Secretary, of the Hecla & Torch Lake Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, JAMES N. WRIGHT,
BETHUEL PENNIMAN.

Subscribed and sworn to before me, this 16th day of May A. D. 1882.
[L. S.] FRED. MACKENZIE,
*Notary Public, Houghton County, Mich.*

# ANNUAL REPORT

OF THE

# HOBART & MANISTEE RIVER RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* JOHN CANFIELD, Manistee, Mich.
*Secretary and Treasurer,* EDWARD D. WHEELER, Manistee, Mich.
*General Superintendent,* HENRY W. MARSH, Hobart, Mich.

## DIRECTORS.

JOHN CANFIELD, Manistee, Mich.
EDWARD D. WHEELER, Manistee, Mich.
HENRY W. MARSH, Hobart, Mich.
RICHARD G. PETERS, Manistee, Mich.
A. O. WHEELER, Manistee, Mich.

Term expires July 19, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, | 7 |
| Number of stockholders in Michigan at same date, | 7 |
| Amount of full-paid stock held in Michigan at same date, | $60,000 00 |

Date of annual meeting of stockholders,—3d Wednesday in July.
Fiscal year of company ends July 16.
General offices of the company are located at Manistee, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $29,771 56 |
| Total expense, including taxes, | $31,919 36 | |
| Net deficit, | $2,147 80 | |
| Balance for the year,—deficit, | $2,147 80 | |
| Balance (profit and loss) last year, | 2,745 61 | |
| Balance forward to next year, | | 4,893 41 |
| | $4,893 41 | $4,893 41 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $60,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $60,000.00; No. of shares, | 600 | | |
| Amount paid in on common, | | $60,000 00 | |
| Total amount paid in as per books of the company, | | | $60,000 00 |
| Amount realized in cash, | | $60,000 00 | |
| Amount paid in per mile of road owned by company, | | 6,493 51 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FLOATING DEBT.

| | |
|---|---|
| Incurred for construction, | $17,716 67 |
| Incurred for equipment, | |
| Incurred in any other manner and how,—material, | 8,839 62 |
| Other debts,—current credit balances, etc., | 4,893 41 |
| Total debt liabilities, | $31,449 79 |
| Amount of debt liabilities per mile of road (9.24 miles), $3,403 64 | |
| Amount of liabilities, after deducting all assets not representing permanent investments, | $4,893 41 |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $55,716 76 |
| Average cost of construction per mile of road not including sidings [9.24 miles], | 6,029 95 |
| Proportion of cost of construction for Michigan, | 55,716 76 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $12,000 00 |
| Freight and other cars, | 8,000 00 |
| Machinery and tools, | 2,000 00 |
| Total for equipment, | $22,000 00 |
| Average cost of equipment per mile of road operated by Company [9.24 miles], | 2,380 95 |
| Proportion of cost of equipment for Michigan, | 22,000 00 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $77,716 76 |
| Average cost of same per mile, | 8,410 90 |
| Proportion of cost of road and equipment for Michigan, | 77,716 76 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Freight charges advanced on steel rails in transit, | $3,509 44 |
| Total charges to property account during the year, | $3,509 44 |
| Net addition to property account for the year, | $3,509 44 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | | $29,771 56 |
| Total earnings freight department, | | $29,771 56 |
| Earnings per train mile run [36,000 miles], | $0 82.69 | |
| Total transportation earnings, | | $29,771 56 |
| Earnings per mile of road operated [9.24 miles], | $3,222 03 | |
| Earnings per train mile run, from all trains earning revenue [36,000], | $0 82.69 | |
| Proportions of earnings for Michigan, | $29,771 56 | |
| Total income from all sources, | | $29,771 56 |
| Proportion of income for Michigan, | $29,771 56 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | |
| Renewal of rails, | |
| Renewal of ties, | |
| Repairs of bridges, including culverts and cattle guards, | |
| Repairs of fences, road crossings, and signs, | |
| Repairs of buildings, | $18,173 93 |
| Total, | $18,173 93 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $500 00 |
| Repairs of freight cars, | 2,000 00 |
| Total, | $2,500 00 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $3,000 00 |
| Water-supply, | 450 00 |
| Oil and waste, | 900 00 |
| Locomotive service, | 3,300 00 |
| Freight train service, | 2,400 00 |
| Freight train supplies, | 600 00 |
| Total, | $10,650 00 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Taxes in Michigan, | $595 43 |
| Total, | $595 43 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $18,173 93 |
| Maintenance of motive power and cars, | 2,500 00 |
| Conducting transportation, | 10,650 00 |
| General expenses, including taxes, | 595 43 |
| Total operating expenses and taxes, | $31,919 36 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, | | $3,454 47 |
| Operating expenses and taxes per train mile for trains earning revenue [36,000 miles], | | $0 88 |
| Per centage of expenses to earnings, | 1.07 | |
| Net loss per mile of road, | | $232 44 |
| Net loss per train mile, | | $0 05.31 |

## ASSETS AND LIABILITIES.

### ASSETS.

| | |
|---|---|
| Construction account, | $55,716 76 |
| Equipment account, | 22,000 00 |
| Other assets: | |
| Materials and supplies, | 8,839 62 |
| Debit balances, | 4,893 41 |
| Total assets, | $91,449 79 |

### LIABILITIES.

| | |
|---|---|
| Capital stock, | $60,000 00 |
| Unfunded debt: | |
| Vouchers and accounts, | 31,449 79 |
| Total liabilities, | $91,449 79 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Manistee River east to terminus, September 1st, 1779.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 9 24 | |
| Total length completed, | | 9 24 |
| Total length of road belonging to this company, | | 9 24 |
| Total length of road belonging to this company in Michigan, | 9 24 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 3 76 |
| Same in Michigan, | 3 76 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 13 00 |
| Same in Michigan, | 13 00 | |
| Gauge of track, 3 feet. | | |
| Total length of track laid with iron rails, weight per yard, 30 lbs. | | 13 00 |
| Total miles of road operated by this company, | 9 24 | |
| Total miles of road operated by this company in Michigan, | 9 24 | |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden trestles, number of, | 2; aggregate length, feet, | 685 |
| Total, | 2 | 685 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 38 |
| Same in Michigan, | 38 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 2 |
| Number of platform cars, | 6 |
| Other cars as follows: | |
| Loggers, | 36 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by freight trains during the year, | 36,000 |
| Total mileage of trains earning revenue, | 36,000 |
| Total train mileage, | 36,000 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in freight trains, | 15 |
| Average weight of freight trains, exclusive of freight, in tons, | 46 |

*Freight Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of tons of local freight carried, | 119,400 | | |
| Total tons of freight carried, | 119,400 | | |
| Total freight mileage, or tons carried one mile, | | 835,800 | |
| Average ton haul for local freight, | | 7 | |
| Average ton haul for all freight, | | 7 | |
| Average amount received for each ton haul, | | | 24.9 |
| Average rate per ton mile, received for local freight, | | | 03.5 |
| Average rate per ton mile, received for all freight, | | | 03.5 |

*Tonnage of Articles Transported.*

| | | |
|---|---|---|
| Lumber and forest products, | 119,400 | 100.00 |
| Total tons carried, | 119,400 | 100.00 |

STATE OF MICHIGAN, }
COUNTY OF MANISTEE, } ss.

John Canfield, President and Acting Superintendent, and E. D. Wheeler, Secretary and Treasurer, of the Hobart & Manistee River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, JOHN CANFIELD,
*President and Acting Superintendent.*
E. D. WHEELER,
*Secretary and Treasurer.*

Subscribed and sworn to before me, this 7th day of March, A. D. 1882.
[L. S.] NELSON C. PHINNEY,
*Notary Public, Manistee County, Mich.*

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 38 |
| Same in Michigan, | 38 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 2 |
| Number of platform cars, | 6 |
| Other cars as follows: | |
| Loggers, | 36 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

| | |
|---|---|
| Miles run by freight trains during the year, | 36,000 |
| Total mileage of trains earning revenue, | 36,000 |
| Total train mileage, | 36,000 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in freight trains, | 15 |
| Average weight of freight trains, exclusive of freight, in tons, | 46 |

*Freight Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Number of tons of local freight carried, | 119,400 | | |
| Total tons of freight carried, | 119,400 | | |
| Total freight mileage, or tons carried one mile, | | 835,800 | |
| Average ton haul for local freight, | | 7 | |
| Average ton haul for all freight, | | 7 | |
| Average amount received for each ton haul, | | | 24.9 |
| Average rate per ton mile, received for local freight, | | | 03.5 |
| Average rate per ton mile, received for all freight, | | | 03.5 |

*Tonnage of Articles Transported.*

| | | |
|---|---|---|
| Lumber and forest products, | 119,400 | 100.00 |
| Total tons carried, | 119,400 | 100.00 |

STATE OF MICHIGAN, }
COUNTY OF MANISTEE, } ss.

John Canfield, President and Acting Superintendent, and E. D. Wheeler, Secretary and Treasurer, of the Hobart & Manistee River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, JOHN CANFIELD,
*President and Acting Superintendent.*
E. D. WHEELER,
*Secretary and Treasurer.*

Subscribed and sworn to before me, this 7th day of March, A. D. 1882.
[L. S.] NELSON C. PHINNEY,
*Notary Public, Manistee County, Mich.*

# ANNUAL REPORT

OF THE

# LAKE COUNTY RAILROAD COMPANY,

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

No officers yet elected.

## DIRECTORS.

THOMAS R. LYON, Ludington, Mich.
JOHN B. LYON, Chicago, Ill.
JOHN S. WOODRUFF, Ludington, Mich,
M. A. NEILAN, Ludington, Mich.
LUCIUS K. BAKER, Ludington, Mich.

Term expires September 1, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

Number of stockholders at date of last election, - 7 original subscribers.
Number of stockholders in Michigan at same date, - - 6
Amount of full-paid stock held in Michigan at same date,—No certificates of stock issued.
Date of annual meeting of stockholders,—September 1st.
General offices of the company are located at Ludington, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $21,714 31 |
| Total expense, including taxes, | $15,714 31 | |
| Net income, | | $6,000 00 |
| Balance for the year,—deficit, | $6,000 00 | |
| Balance forward to next year, | | $6,000 00 |
| | $6,000 00 | $6,000 00 |

## ANALYSIS OF CAPITAL STOCK.

| | | |
|---|---|---|
| Amount authorized by charter or articles of association, | | $300,000 00 |
| Par value of shares, | $100 00 | |
| Amount paid in on shares not issued (number 5,000), | $50,000 00 | |
| Total amount paid in as per books of the Company, | | 50,000 00 |
| Amount paid in per mile of road owned by company, | $8,333 33 | |

## COST OF ROAD AND EQUIPMENT.

*Construction of Road and Branches (not reported separately), Built by Company.*

| | |
|---|---|
| Grading and masonry, | |
| Bridging, | |
| Superstructure, including rails, | |
| Land, land damages, and fences, | $32,000 00 |
| Passenger and freight stations, wood-sheds and water stations, | |
| Engine-houses, car-sheds, and turn-tables, | 2,000 00 |
| Total expended for construction, | $34,000 00 |
| Average cost of construction per mile of road (not including sidings), [6 miles], | 5,666 66 |
| Proportion of cost of construction for Michigan, | 34,000 00 |

*Cost of Equipment.*

| | |
|---|---|
| Locomotives, | $11,000 00 |
| Freight and other cars, | 5,000 00 |
| Total for equipment, | $16,000 00 |

| | |
|---|---|
| Average cost of equipment per mile of road operated by company [6 miles], | $2,666 66 |
| Proportion of cost of equipment for Michigan, | 16,000 00 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $50,000 00 |
| Average cost of same per mile, | 8,333 33 |
| Proportion of cost of road and equipment for Michigan, | 50,000 00 |

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Main line, extension of road, | $8,000 00 |
| Passenger and freight stations, wood-sheds, and water stations, Engine-houses, car-sheds, and turn-tables, | 1,000 00 |
| New locomotives, | 5,000 00 |
| New freight cars, | 1,000 00 |
| Total charges to property account during the year, | $15,000 00 |
| Net addition to property account for the year, | $15,000 00 |

## ANALYSIS OF EARNINGS AND EXPENSES.

### EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | $21,714 31 | |
| Total earnings, freight department, | | $21,714 31 |
| Total transportation earnings, | | $21,714 31 |
| Earnings per mile of road operated [6 miles], | $3,619 05 | |
| Proportion of earnings for Michigan, | 21,714 31 | |
| Total income from all sources, | | $21,714 31 |
| Proportion of income for Michigan, | | $21,714 31 |

### EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, Renewal of rails, Renewal of ties, Repairs of bridges, including culverts and cattle guards, Repairs of fences, road crossings, and signs, Repairs of buildings, | $4,500 00 |
| Total, | $4,500 00 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $5,500 00 |
| Repairs of freight cars, | |
| Total, | $5,500 00 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $5,714 31 |
| Water-supply, | |
| Oil and waste, | |
| Locomotive service, | |
| Freight train service, | |
| Freight train supplies, | |
| Agents and station service, | |
| Station supplies, | |
| Total, | $5,714 31 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $4,500 00 |
| Maintenance of motive power and cars, | 5,500 00 |
| Conducting transportation, | 5,714 31 |
| General expenses, including taxes, | |
| Total operating expenses and taxes, | $15,714 31 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road operated, 6 miles, | | $2,619 05 |
| Proportion of operating expenses and taxes for Michigan, | | $15,714 31 |
| Per centage of expenses to earnings, | 72 | |
| Net earnings per mile of road, | | $1,000 00 |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $34,000 00 |
| Equipment account, | 16,000 00 |
| Cash items: | |
| Cash, | 500 00 |
| Total assets, | $50,500 00 |

LIABILITIES.

| | |
|---|---|
| Capital stock, | $50,000 00 |
| Unfunded debt: | |
| Due employés, | 500 00 |
| Total liabilities, | $50,500 00 |

## DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Elk on N. W. ¼ 29 (18–14) to sections 5 and 7 (18–14), August 20, 1880.

### MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| Length completed in Michigan, | 6 00 | |
| Total length completed, | | 6 00 |
| Total length of road belonging to this company, | | 6 00 |
| Total length of road belonging to this company in Michigan, | 6 00 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 25 |
| Same in Michigan, | 25 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 6 25 |
| Same in Michigan, | 6 25 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 35 lbs., | | 4 00 |
| Total length of tracks laid with iron rails, weight per yard, 35 lbs. | | 2 25 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 2; aggregate length, feet, | 650 |
| Total, | 2 | 650 |

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?
Flint & Pere Marquette R. R., near Branch Station.

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 1 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 10 |
| Same in Michigan, | 10 |

### ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 20 tons weight, exclusive of tender, | 1 |
| Number of locomotives of more than 10 tons weight, exclusive of tender, | 1 |

Other cars as follows:

| | |
|---|---|
| Loggers, - - - - - - - - - - - - | 29 |

MILEAGE, TRAFFIC, ETC.

No statistics kept.

STATE OF MICHIGAN, }
COUNTY OF MASON, } ss.

Thomas R. Lyon and James S. Woodruff, directors of the Lake County Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed), THOMAS R. LYON,
JAS. S. WOODRUFF.

Subscribed and sworn to before me, this 28th day of April, A. D. 1882.

[L. S.] WILLIAM FOY,
*Notary Public, Mason county, Mich.*

ANNUAL REPORT

OF THE

# LAKE GEORGE & MUSKEGON RIVER RAILROAD COMPANY.

*For the Year ending December 31, 1881.*

---

## OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President,* NATHANIEL L. GERRISH, Muskegon, Mich.
*Vice President,* JOHN L. WOODS, Cleveland, Ohio.
*Secretary and Auditor,* J. VERREE WATSON, Stafford Station, Mich.
*Treasurer and General Manager,* W. S. GERRISH, Muskegon, Mich.
*General Superintendent,* M. J. BORLAND, Muskegon, Mich.
*Superintendent of Telegraph,* JOSEPH W. SMITH, Stafford Station, Mich.

## DIRECTORS.

N. L. GERRISH, Cadillac, Mich.
W. S. GERRISH, Muskegon, Mich.
JOHN L. WOODS, Cleveland, Ohio.
B. F. WILDER, Farwell, Mich.
J. VERREE WATSON, Muskegon, Mich.

Term expires May 23, 1882.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

| | |
|---|---|
| Number of stockholders at date of last election, - - - | 6 |
| Number of stockholders in Michigan at same date, - - | 4 |
| Amount of full paid stock held in Michigan at same date, - | $98,500 00 |

Date of annual meeting of stockholders, May 23d.
Fiscal year of company ends December 31.
General offices of the company are located at Muskegon, Mich.

## GENERAL EXHIBIT.

| | Debit. | Credit. |
|---|---|---|
| Total income, | | $70,319 65 |
| Total expense, including taxes, | $86,355 02 | |
| Net deficit, | $16,035 37 | |
| Balance for the year, | $16,085 37 | |
| Balance (profit and loss) last year), | 56,400 79 | |
| Items not included in above, as follows: | | |
| Old iron sold, | | 6,666 15 |
| Miscellaneous receipts, | | 464 52 |
| Balance forward to next year, | | 65,356 49 |
| | $72,486 16 | $72,486 16 |

## ANALYSIS OF CAPITAL STOCK.

| | | | |
|---|---|---|---|
| Amount authorized by charter or articles of association, | | | $100,000 00 |
| Par value of shares, | $100 00 | | |
| Average price received per share, | $100 00 | | |
| Amount issued, $98,500.00; No. of shares, | 985 | | |
| Amount paid in on common, | | $98,500 00 | |
| Total amount paid in as per books of the company, | | | $98,500 00 |
| Amount realized in cash, | | $98,500 00 | |
| Amount paid in per mile of road owned by company, | | $4,954 73 | |

## ANALYSIS OF DEBT ACCOUNTS.

### FLOATING DEBT.

| | | |
|---|---|---|
| Incurred for construction, | $95,023 12 | |
| Incurred for equipment, | | |
| Incurred in any other manner and how: | | |
| Taxes State of Michigan, | 1,406 39 | |
| | | $96,429 51 |
| Total debt liabilities, | | $96,429 51 |
| Amount of debt liabilities per mile of road [19.88 miles], | $4,840 51 | |

## COST OF ROAD AND EQUIPMENT.

| | |
|---|---|
| Total expended for construction, | $170,076 01 |

| | |
|---|---|
| Average cost of construction per mile of road (not including sidings), [19.88 miles], | $8,545 07 |
| Proportion of cost of construction for Michigan, | 170,076 01 |

*Cost of Equipment.*

| | |
|---|---|
| Total for equipment, | $73,548 59 |
| Average cost of equipment per mile of road operated by company [19.88 miles], | 3,800 23 |
| Proportion of cost of equipment for Michigan, | 73,548 59 |

*Cost of Road and Equipment.*

| | |
|---|---|
| Total cost of road and equipment, | $243,624 60 |
| Average cost of same per mile, | 12,254 76 |
| Proportion of cost of road and equipment for Michigan, | 243,624 60 |

CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

| | |
|---|---|
| Machine shops, machinery and tools, | $665 39 |
| Total charges to property account during the year, | $665 39 |
| Net addition to property account for the year, | $665 39 |

ANALYSIS OF EARNINGS AND EXPENSES.

EARNINGS, FREIGHT.

| | | |
|---|---|---|
| From local traffic, | | $70,319 65 |
| From through traffic, | | |
| Total earnings freight department, | | $70,319 65 |
| Earnings per train mile run [47,049 miles], | $1 49 | |
| Earnings per mile of road operated [19.88 miles], | $3,537 25 | |
| Earnings per train mile run, from all trains revenue [47,049 miles], | $1 49 | |
| Proportion of earnings for Michigan, | $70,319 65 | |
| Total income from all sources, | | $70,319 65 |
| Proportion of income for Michigan, | $70,319 65 | |

EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

| | |
|---|---|
| Repairs of roadway and track, | $5,946 19 |
| Renewal of ties, | 460 00 |
| Total, | $6,406 19 |

CLASS 2.—*Maintenance of Motive Power and Cars.*

| | |
|---|---|
| Repairs of locomotives, | $2,330 67 |
| Repairs of freight cars, | 2,524 82 |
| Total, | 4,855 49 |

CLASS 3.—*Conducting Transportation.*

| | |
|---|---|
| Fuel for locomotives, | $5,223 96 |
| Water-supply, | 225 00 |
| Oil and waste, | 1,609 95 |
| Locomotive service, | 11,960 80 |
| Freight train service, | 4,012 00 |
| Telegraph expenses (maintenance and operating)—telephone, | 1,031 78 |
| Personal injuries, | 57 00 |
| Agents and station service, and station supplies, | 48,097 17 |
| Total, | $72,217 66 |

CLASS 4.—*General Expenses.*

| | |
|---|---|
| Salaries of clerks in general offices, | $1,500 00 |
| Law expenses, | 150 00 |
| Stationery and printing, | 126 26 |
| Outside agencies and advertising, | 5 00 |
| Contingencies, | 1,094 22 |
| Total, | $2,875 68 |

RECAPITULATION OF EXPENSES.

| | |
|---|---|
| Maintenance of way and buildings, | $6,406 19 |
| Maintenance of motive power and cars, | 4,855 49 |
| Conducting transportation, | 72,217 66 |
| General expenses, including taxes, | 2,875 68 |
| Total operating expenses and taxes, | $86,355 02 |

| | | |
|---|---|---|
| Operating expenses and taxes per mile of road, 19.88 miles, | | $4,343 81 |
| Operating expenses and taxes per train mile run, for trains earning revenue [47,049 miles], | | $1 83 |
| Per centage of expenses to earnings, | 122 | |
| Net deficit per mile of road, | | $806 56 |
| Net deficit per train mile, | | $0 34 |

ASSETS AND LIABILITIES.

ASSETS.

| | |
|---|---|
| Construction account, | $170,076 01 |
| Equipment account, | 73,548 59 |

| | | |
|---|---|---|
| Other assets: | | |
| Materials and supplies, | $1,500 00 | |
| Capital stock, shares not issued, | 1,500 00 | |
| | | $3,000 00 |
| Total assets, | | $246,624 06 |

LIABILITIES.

| | | |
|---|---|---|
| Capital stock, | | $100,000 00 |
| Unfunded debt: | | |
| Vouchers and accounts, | $98,023 12 | |
| Taxes, 1881, | 1,406 39 | |
| | | 99,429 51 |
| Profit and loss, or income accounts, | | 47,195 09 |
| Total liabilities, | | $246,624 60 |

DESCRIPTION OF ROAD.

Date when the road or portions thereof were opened for public use:
From Lake George to Muskegon River, January, 1877.

| | | |
|---|---|---|
| Length completed in Michigan, | 11 13 | |
| Total length completed, | | 11 13 |

MAIN LINE.

| | Miles. 100ths. | Miles. 100ths. |
|---|---|---|
| East from Budd Lake Junction to Lilly Lake, | 7 00 | |
| Northeast from E. line sec. 30–19–5 to center sec. 17–19–5, | 1 75 | |
| Total length of branches owned by company, | | 8 75 |
| Total length of branches owned by company in Michigan, | 8 75 | |
| Total length of road belonging to this company, | | 19 88 |
| Total length of road belonging to this company in Michigan, | 19 88 | |
| Aggregate length of sidings, spurs, and other tracks not above enumerated, | | 1 17 |
| Same in Michigan, | 1 17 | |
| Aggregate length of tracks belonging to this company computed as single track, | | 20 05 |
| Same in Michigan, | 20 05 | |
| Gauge of track, 4 feet, 8½ inches. | | |
| Total length of track laid with steel rails, weight per yard, 35 lbs., | | 3 00 |
| Total length of tracks laid with iron rails, weight per yard, 25 lbs., | | 17 05 |

*Number of Bridges and Trestles in Michigan.*

| | | |
|---|---|---|
| Wooden bridges, number of, | 18; aggregate length, feet, | 14,300 |
| Wooden trestles, number of, | 1; aggregate length, feet, | 2,600 |
| Total, | 19 | 16,900 |

*Crossings—Railroad and Highway.*

| | |
|---|---|
| Number of crossings of highways at grade in this State without protection, | 20 |

*Stations.*

| | |
|---|---|
| Number of stations on whole line, | 10 |
| Same in Michigan, | 10 |

*Employés.*

| | |
|---|---|
| Number of persons regularly employed on all roads operated by company, including officials, | 109 |
| Same in Michigan, | 109 |

*Fencing.*

| | |
|---|---|
| Give the miles of fence needed on both sides of your track, in each county in Michigan traversed by your road: | |
| In Clare county, | 39.76 |
| Total miles, | 39.76 |

REPAIRS AND RENEWALS.

*Road Bed and Track.*

| | |
|---|---|
| Number of track sections in Michigan, | 5 |
| Average length of sections,—miles, | 4 |
| Average number of men in each section gang, | 4 |
| Number of new ties put in whole line during the year, | 4,600 |
| Number of new ties put in track in Michigan, | 4,600 |
| Average number of new ties per mile of road, | 253 |

ROLLING STOCK.

| | |
|---|---|
| Number of locomotives of more than 7 tons weight, exclusive of tender, | 4 |
| Number of box freight cars, | 1 |
| Number of platform cars, | 6 |
| Other cars as follows: | |
| Loggers, 65; wrecker, 1; snow plow, 1, | 67 |

MILEAGE, TRAFFIC, ETC.

*Train Mileage—whole Road.*

| | |
|---|---|
| Miles run by freight trains during the year, | 47,049 |
| Total mileage of trains earning revenue, | 47,049 |

| | |
|---|---|
| Miles run by work trains during the year, | 1,500 |
| Total train mileage, | 48,549 |

*Cars and Weight of Trains.*

| | |
|---|---|
| Average number of cars in freight trains, | 12 |

*Freight Traffic.*

| | Numbers and Quantities. | Miles. | Rate. Dols. Cts. |
|---|---|---|---|
| Total tons of freight carried, | 279,308 | | |
| Total freight mileage, or tons carried one mile, | | 2,793,080 | |
| Average ton haul for all freight, | | 10 | |

*Tonnage of Articles Transported—whole Road.*

| | Tons. | Per Ct. |
|---|---|---|
| Lumber and forest products, | 279,308 | |
| Total tons carried, | 279,308 | 100.00 |

## REPORT OF ACCIDENTS FOR MICHIGAN DURING YEAR 1881.

### KILLED.

August 19. Frank Montgomery, Stafford Station; carelessness.
August 27. George Elliott, Budd Lake Junction; carelessness.

### TABULAR STATEMENT OF ACCIDENTS.

| CAUSES OF ACCIDENT. | Killed. | | | Injured. | | |
|---|---|---|---|---|---|---|
| | Passengers. | Employes. | Others. | Passengers. | Employes. | Others. |
| Collisions | | | | | | |
| Coupling cars | | | | | | |
| Derailments | | | | | | |
| Falling from trains | | 1 | | | | |
| Frogs | | | | | | |
| Getting on and off trains | | | | | | |
| Highway crossings | | | | | | |
| Miscellaneous | | 1 | | | | |
| Overhead obstructions | | | | | | |
| Stealing rides | | | | | | |
| Trespassers | | | | | | |
| Total | | 2 | | | | |

SUMMARY OF ACCIDENTS.

| | |
|---|---|
| Number of persons killed during the year on the entire line, | 2 |
| Same for Michigan, | 2 |
| Number of persons injured during the year on the entire line, | — |
| Same for Michigan, | — |
| Number of casualties purely accidental in Michigan, | — |
| Number resulting from lack of caution, carelessness, or misconduct, in Michigan, | — |
| Persons killed or injured in Michigan while intoxicated, | 2 |
| Trespassers and tramps killed or injured in Michigan, | — |
| Suicides in Michigan, | — |

STATE OF MICHIGAN, } ss.
COUNTY OF OSCEOLA, }

N. L. Gerrish, President, and J. Verree Watson, Secretary, of the Lake George & Muskegon River Railroad Company, being duly sworn, depose, and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1881, to the best of their knowledge and belief.

[L. S. OF R. R.] (Signed) N. L. GERRISH,
J. VERREE WATSON,

Subscribed and sworn to before me, this 18th day of July, A. D. 1882.
[L. S.] DELOS F. DEGGORIS,
*Notary Public, Osceola County, Mich.*

# PROCEEDINGS

OF THE

# STATE BOARD OF EQUALIZATION

OF

# MICHIGAN,

AT ITS SESSION IN THE CITY OF LANSING,

AUGUST, 1881.

BY AUTHORITY.

LANSING:
W. S. GEORGE & CO., STATE PRINTERS AND BINDERS.
1882.

# PROCEEDINGS.

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SENATE CHAMBERS,
*Lansing, Michigan, August 15, 1881.*

The State Board of Equalization, in accordance with the requirements of act No. 106, laws of 1851, met in the Senate Chamber in the capitol, at Lansing, at 7.30 o'clock P. M., on the third Monday of August (the fifteenth day of the month), 1881. The members of the Board were all present, viz.:

MOREAU S. CROSBY, *Lieutenant Governor.*
W. IRVING LATIMER, *Auditor General.*
WILLIAM JENNEY, *Secretary of State.*
BENJ. D. PRICHARD, *State Treasurer.*
JAS. M. NEASMITH, *Commissioner of State Land Office.*

The members of the Board were duly sworn by H. R. Pratt, a notary public. The Board then organized by electing Lieutenant Governor Moreau S. Crosby, chairman. H. R. Pratt, Deputy Auditor General, was designated as secretary, and duly sworn.

The following order of business was adopted:

1. Receiving statements from the several Boards of Supervisors through the persons present to represent such Boards.
2. Examining tabular statements of the Boards of Supervisors of each county.
3. Equalizing the assessments between the counties.

Delegates or representatives were present from the Boards of Supervisors of the various counties as follows:

*Alcona*—GEO. RUTSON, Harrisville.
*Alpena*—JAMES A. CASE, Alpena.
*Barry*—JOHN DAWSON, Hastings.
*Bay* — { CHAS. F. BRAMAN, Bay City.
{ IRA E. SWART, Auburn.
*Berrien*—CHAS. F. HOWE, Buchanan.
*Branch*—GEO. W. VANAKEN, Coldwater.
*Calhoun*—CHAS. E. DARROW, Homer.
*Cass*—CHAS. L. MORTON, Cassopolis.
*Cheboygan*—ROBERT IANSON, Burt Lake.
*Clinton*—O. M. MERRILL, St. Johns.
*Eaton*—JOHN DOW, Hoytville.
*Genesee*—JAMES VAN VLEET, Flint.

*Grand Traverse*—J. B. HAVILAND, Traverse City.
*Gratiot*—CHAS. H. MORSE, Carson City.
*Hillsdale*—WARREN A. DRAKE, Hillsdale.
*Houghton*—THOS. D. MEADS, Houghton.
*Huron*—JAMES ADAMS. Caseville.
*Ingham*—O. M. BARNES, Lansing.
*Ionia*— { SYLVESTER TAYLOR, CHANCEY WATERBURY.
*Iosco*—E. LAIDLAW, Tawas City.
*Isabella*—SAMUEL CRAFT, Mt. Pleasant.
*Jackson*— { JOSEPH M. GRISWOLD, Brooklyn. PATRICK HANKARD, Henrietta.
*Kalamazoo*—L. W. LOVELL, Climax.
*Kalkaska*—GEO. D. HIGLEY, Fife Lake.
*Kent* — { R. B. LOOMIS, Grand Rapids. SAMUEL TOBEY.
*Lake*—GEO. N. JONES, Baldwin City.
*Lapeer*—PETER STIVER.
*Lenawee*—CHAS. H. DEWEY, Cambridge.
*Livingston*—GILES LEE, Brighton.
*Macomb*—THOMAS DAWSON, Memphis.
*Manistee*—SEYMOUR CALKINS, Pierport.
*Marquette*—M. H. MAYNARD, Marquette.
*Mason*—CHAS. E. STORRS, Marble.
*Menominee*—JOSEPH FLESHIEM, Menominee.
*Monroe*—HIRAM WAKELEY, Whiteford Centre.
*Montcalm*—W. DIVINE, Belding.
*Montmorency*—WM. C. CAIN, Alpena.
*Muskegon*—HENRY H. HOLT, Muskegon.
*Newaygo*—S. WEBSTER, Hesperia.
*Oakland* — { JOSEPHUS SMITH, Troy. JAMES RUTHERFORD, Milford.
*Oceana*—N. C. SMITH, Pentwater.
*Ontonagon*—T. NESTER, Ontonagon.
*Oscoda*—C. M. COMINS, Roscommon.
*Ottawa*—KOMMER SCHADDELEE, Holland.
*Presque Isle*—ROBERT HORN, Rogers City.
*Roscommon*—WM. MINNIS.
*Saginaw* — { ARTHUR ROSS, Taymouth. D. C. DIXON, Saginaw.
*Sanilac*—CHRISTOPHER MURPHY, Cass City.
*Shiawassee*—ALFRED B. CRANE, Owosso.
*St. Clair*—EDGAR WHITE, Port Huron.
*St. Joseph*—A. P. EMERY, Mendon.
*Tuscola*—J. L. RICHARDSON.
*Van Buren*—S. P. WILSON, South Haven.
*Washtenaw*—CHAS. H. RICHMOND, Ann Arbor.
*Wayne* — { JOHN D. STANDISH, Detroit. JAS. A. VISGER.
*Wexford* — { J. W. HOTALING. S. S. FALLAS.

Tabular statements[1] from all the counties in the State, except Delta, Isle Royal and Manitou[2], showing the number of acres of land, the value of the real estate and personal property in each township and ward therein as assessed; and also the aggregate valuation of each as equalized by the Boards of Supervisors of each, and certified by the chairman and clerk thereof, were presented to the State Board of Equalization by the Auditor General, who informed the Board that no such statements had been received at his office from Delta, Isle Royal or Manitou[2] counties.

Mr. Meads of Houghton county, and Mr. Fleshiem of Menominee county, asked permission to be heard on behalf of their respective counties out of their regular order. The requests were granted.

On motion, the Board adjourned until 8 o'clock to-morrow morning.

---

*Tuesday, August 16, 1881.*

The Board met at 8 o'clock A. M., pursuant to adjournment. Members all present. The minutes of the previous session were read and approved.

The first order of business, statements of the delegates from the various Boards of Supervisors, was taken up, and in accordance with permission granted last evening, Mr. Meads of Houghton made a verbal statement, and a written statement[3] was submitted by Mr. Fleshiem of Menominee. The Secretary was directed to call the list of counties in alphabetical order, and delegates responded by written or verbal statements. After hearing from Alcona and Alpena, on motion of Auditor General Latimer, Mr. Cain of Montmorency was permitted to address the Board in advance of the order of his county, which he did verbally. Alphabetical order of counties was then resumed, and the remainder of the morning session was occupied in listening to statements of delegates.[4]

At fifteen minutes before twelve, on motion of State Treasurer Pritchard, the Board took a recess until two o'clock P. M.

---

*Afternoon Session, 2 P. M.*

At 2:10 P. M. the Board came to order. Members all present.

The first order of business was resumed. The entire session was occupied in listening to statements of delegates from counties. By special permission the delegates from Saginaw county, Messrs. Ross and Dixson, were heard out of their regular order.

At 5:20 P. M. the Board adjourned until to-morrow morning at 9 o'clock.

---

*Wednesday, August 17, 1881.*

The Board met at 9 o'clock, pursuant to adjournment. Members all

---

[1] Tables 1 to 77.
[2] A statement was received from Manitou county in September. See table No. 45.
[3] See Menominee county, statements of delegates.
[4] See subsequent pages where the statements are arranged by counties without reference to time when made.

present. The minutes of yesterday's sessions read and approved. Entire session occupied under the first order of business, listening to statements of delegates from the various counties.

At 11:15 the Board adjourned to meet at 2 o'clock P. M.

---

*Afternoon Session, 2 P. M.*

The Board met pursuant to adjournment. Members all present.

The delegates from the several counties having concluded their statements, the Board took up the second order of business, and proceeded to the examination of the tabular statements of assessed and equalized valuations, as certified by the chairmen and clerks of the several Boards of Supervisors that had been forwarded to the Auditor General, and were by him presented to the State Board of Equalization.

From the tabular statements above referred to, and from the statements made by the delegates from the several Boards of Supervisors, and from the best information otherwise accessible, the Board determined that the assessments as set forth in said tabular statements are relatively unequal, and under the third order of business, proceeded to equalize the same by adding to or deducting from the aggregate valuation of taxable real and personal estate, as set forth in said tabular statements such per centage as would produce relative, equal and uniform valuations between the several counties in the State.

At 5:05 the Board adjourned to meet at 8 o'clock to-morrow morning.

---

*Thursday, August 18, 1881.*

The Board met pursuant to adjournment. Members all present. Minutes of yesterday's sessions were read and approved.

The third order of business was resumed, and continued until 12 M, when the Board adjourned until 7:30 P. M.

---

*Evening Session, 7:30 P M.*

The Board met pursuant to adjournment. Members all present. Work under the third order of business was continued throughout the session.

At 9:20 P. M. the Board adjourned until 9 o'clock to-morrow morning.

---

*Friday, August 19, 1881.*

At 9 A. M. the Board met pursuant to adjournment. Members all present. Minutes of yesterday's sessions were read and approved.

Unfinished business under the third order was taken up, and the Board proceeded with the equalization which was determined and fixed by additions to, and deductions from, the aggregate of real and personal estate, as equalized by the Boards of Supervisors at their session in June, 1881, as follows:

## COUNTIES HAVING AMOUNTS ADDED.

| Counties. | Amounts Added. | Counties. | Amounts Added. |
|---|---|---|---|
| Alcona | $7,473 00 | Lapeer | 865,000 00 |
| Allegan | 4,196,500 00 | Leelanaw | 225,966 00 |
| Alpena | 600,000 00 | Lenawee | 454,036 00 |
| Antrim | 262,317 75 | Livingston | 5,661,590 00 |
| Baraga | 660,344 00 | Mackinac | 1,096,044 29 |
| Barry | 1,694,709 00 | Manistee | 1,808,750 00 |
| Bay | 7,000,000 00 | Manitou | 250,000 00 |
| Benzie | 478,506 00 | Marquette | 2,095,060 00 |
| Berrien | 1,958,063 00 | Mecosta | 452,066 20 |
| Branch | 7,345,000 00 | Menominee | 742,137 75 |
| Calhoun | 3,995,846 75 | Midland | 990,137 00 |
| Cass | 1,220,000 00 | Missaukee | 262,441 56 |
| Charlevoix | 366,149 00 | Monroe | 786,723 50 |
| Cheboygan | 299,000 00 | Montcalm | 1,010,000 00 |
| Chippewa | 441,929 00 | Montmorency | 47,127 00 |
| Clare | 610,922 00 | Muskegon | 3,179,897 75 |
| Clinton | 701,500 00 | Newaygo | 1,853,708 00 |
| Crawford | 274,059 65 | Oakland | 2,744,723 00 |
| Delta | 2,500,000 00 | Oceana | 1,224,407 00 |
| Eaton | 4,000,000 00 | Ogemaw | 383,066 68 |
| Emmet | 1,163,607 00 | Ontonagon | 978,442 00 |
| Genesee | 1,884,572 29 | Osceola | 592,780 00 |
| Gladwin | 140,905 00 | Oscoda | 250,532 00 |
| Grand Traverse | 474,125 00 | Otsego | 380,052 00 |
| Gratiot | 3,500,000 00 | Ottawa | 2,183,381 00 |
| Hillsdale | 2,986,766 00 | Presque Isle | 220,174 01 |
| Houghton | 880,411 00 | Roscommon | 423,867 86 |
| Huron | 338,018 00 | Saginaw | 5,063,969 97 |
| Ingham | 5,057,800 00 | Sanilac | 1,093,746 00 |
| Ionia | 1,069,249 00 | Schoolcraft | 565,295 00 |
| Iosco | 838,000 00 | Shiawassee | 2,490,000 00 |
| Isabella | 900,000 00 | St. Clair | 3,858,922 00 |
| Isle Royal | 100,000 00 | St. Joseph | 1,896,152 00 |
| Jackson | 17,744,699 00 | Tuscola | 843,642 00 |
| Kalamazoo | 3,915,463 00 | Van Buren | 2,000,000 00 |
| Kalkaska | 19,693 00 | Wayne | 12,160,407 00 |
| Kent | 14,986,790 00 | Wexford | 1,177,098 50 |
| Keweenaw | 61,800 87 | | |
| Lake | 173,798 00 | | 157,159,359 38 |

## COUNTIES HAVING AMOUNTS DEDUCTED.

| Counties. | Amounts Deducted. |
|---|---|
| Macomb | $1,000,000 00 |
| Mason | 165,244 80 |
| | $1,165,244 80 |

## COUNTIES NOT CHANGED.

### Washtenaw.

The amounts of real and personal property in the several counties as equalized by the Boards of Supervisors in June, 1881, to which amounts were added, or from which amounts were deducted as above, by the State Board of Equalization, are as follows:

| COUNTIES. | Real and Personal Estate, as Equalized by Boards of Supervisors. | COUNTIES. | Real and Personal Estate, as Equalized by Boards of Supervisors. |
|---|---|---|---|
| Alcona | $2,492,527 00 | Lenawee | 27,045,964 00 |
| Allegan | 9,303,500 00 | Livingston | 9,338,410 00 |
| Alpena | 2,500,000 00 | Mackinac | 1,403,955 71 |
| Antrim | 2,237,682 25 | Macomb | 16,000,000 00 |
| Baraga | 639,656 00 | Manistee | 1,691,250 00 |
| Barry | 11,305,291 00 | Manitou | No report. |
| Bay | 11,000,000 00 | Marquette | 2,904,940 00 |
| Benzie | 1,021,494 00 | Mason | 3,165,244 80 |
| Berrien | 13,041,937 00 | Mecosta | 3,047,933 80 |
| Branch | 10,155,000 00 | Menominee | 1,757,862 25 |
| Calhoun | 20,504,153 25 | Midland | 2,009,863 00 |
| Cass | 14,280,000 00 | Missaukee | 1,537,558 44 |
| Charlevoix | 1,633,851 00 | Monroe | 15,213,276 50 |
| Cheboygan | 2,701,000 00 | Montcalm | 8,490,000 00 |
| Chippewa | 1,558,071 00 | Montmorency | 1,202,873 00 |
| Clare | 1,889,078 00 | Muskegon | 3,320,102 25 |
| Clinton | 15,298,500 00 | Newaygo | 2,146,292 00 |
| Crawford | 925,940 35 | Oakland | 23,505,277 00 |
| Delta | No report. | Oceana | 1,775,593 00 |
| Eaton | 12,000,000 00 | Ogemaw | 1,116,933 32 |
| Emmet | 836,393 00 | Ontonagon | 1,021,558 00 |
| Genesee | 19,115,427 71 | Osceola | 1,907,220 00 |
| Gladwin | 1,059,095 00 | Oscoda | 749,468 00 |
| Grand Traverse | 2,525,875 00 | Otsego | 1,119,948 00 |
| Gratiot | 3,500,000 00 | Ottawa | 6,316,619 00 |
| Hillsdale | 18,013,234 00 | Presque Isle | 1,029,825 99 |
| Houghton | 1,619,589 00 | Roscommon | 1,076,132 14 |
| Huron | 4,661,982 00 | Saginaw | 19,936,030 03 |
| Ingham | 10,942,200 00 | Sanilac | 3,906,254 00 |
| Ionia | 14,930,751 00 | Schoolcraft | 1,934,705 00 |
| Iosco | 1,162,000 00 | Shiawassee | 11,010,000 00 |
| Isabella | 3,100,000 00 | St. Clair | 11,141,078 00 |
| Isle Royal | No report. | St. Joseph | 16,103,848 00 |
| Jackson | 9,255,301 00 | Tuscola | 8,156,358 00 |
| Kalamazoo | 19,084,537 00 | Van Buren | 12,000,000 00 |
| Kalkaska | 2,480,307 00 | Washtenaw | 30,000,000 00 |
| Kent | 18,013,210 00 | Wayne | 117,839,593 00 |
| Keweenaw | 738,199 13 | Wexford | 1,822,901 50 |
| Lake | 1,826,202 00 | | |
| Lapeer | 12,135,000 00 | Total | $654,005,885 42 |
| Leelanaw | 774,094 00 | | |

| | |
|---|---|
| Aggregate of real and personal estate as equalized by Boards of Supervisors in June, 1881 | $654,005,885 42 |
| Aggregate addition by State Board of Equalization | 157,159,359 38 |
| | $811,165,244 80 |
| Aggregate deduction by State Board of Equalization | 1,165,244 80 |
| Aggregate as equalized by State Board of Equalization | $810,000,000 00 |

A table was prepared showing the additions to, and the deductions from, the valuation of each county as equalized by the Boards of Supervisors, whereupon Commissioner Neasmith offered the following:

*Resolved*, That the amounts standing in the last, or right-hand column of the annexed table, stand as the equalized valuation of the several counties in the State. as equalized by the State Board of Equalization of 1881,

Which was adopted, all the members of the board voting in favor thereof.

*Statement Showing Population for 1880, No. of Acres of Land Assessed in 1881, Aggregate of Real and Personal Estate as Assessed in 1881, Aggregate of Real and Personal Estate as Equalized by Boards of Supervisors for 1881, Amount Added or Deducted by State Board of Equalization, Aggregate of Real and Personal Estate as Equalized by State Board of Equalization for 1881.*

| COUNTIES. | Population, 1880. | No. of Acres of Land Assessed in 1881. | Agregate of Real and Personal Estate, as Assessed in 1881. | Aggregate of Real and Personal Estate, as Equalized by Boards of Supervisors 1881. | Amount Added or Deducted by State Board of Equalization. | | Aggregate of Real and Personal Estate, as Equalized by State Board of Equalization for 1881. |
|---|---|---|---|---|---|---|---|
| Alcona | 3,107 | 366,497.48 | $2,492,527 00 | $2,492,527 00 | Add | $7,473 00 | $2,500,000 00 |
| Allegan | 37,806 | 516,120.00 | 9,652,330 00 | 9,303,500 00 | Add | 4,196,500 00 | 13,500,000 00 |
| Alpena | 11 8,789 | 279,242.60 | 3,016,508 50 | 2,500,000 00 | Add | 600,000 00 | 3,100,000 00 |
| Antrim | 5,237 | 290,656.98 | 2,152,872 11 | 2,237,682 25 | Add | 262,317 75 | 2,500,000 00 |
| Baraga | 1,804 | 331,531.31 | 639,656 00 | 639,656 00 | Add | 660,344 00 | 1,300,000 00 |
| Barry | 25,319 | 352,302.32 | 11,332,459 00 | 11,306,291 00 | Add | 1,694,709 00 | 13,000,000 00 |
| Bay | 38,081 | 486,970 43 | 12,901,183 00 | 11,000,000 00 | Add | 7,000,000 00 | 18,000,000 00 |
| Benzie | 3,433 | 180,329.45 | 1,205,586 00 | 1,021,494 00 | Add | 478,506 00 | 1,500,000 00 |
| Berrien | 36,780 | 352,489.00 | 12,918,434 00 | 13,041,937 00 | Add | 1,958,063 00 | 15,000,000 00 |
| Branch | 27,941 | 315,483.00 | 10,261,965 00 | 10,155,000 00 | Add | 7,345,000 00 | 17,500,000 00 |
| Calhoun | 38,452 | 440,710.00 | 19,527,765 00 | 20,504,153 25 | Add | 3,995,846 75 | 24,500,000 00 |
| Cass | 22,008 | 310,549.00 | 13,667,602 00 | 14,280,000 00 | Add | 1,220,000 00 | 15,500,000 00 |
| Charlevoix | 5,114 | 222,581.00 | 1,631,271 00 | 1,633,851 00 | Add | 366,149 00 | 2,000,000 00 |
| Cheboygan | 6,524 | 416,744.28 | 2,761,832 00 | 2,701,000 00 | Add | 299,000 00 | 3,000,000 00 |
| Chippewa | 5,243 | 505,283.00 | 1,558,071 00 | 1,558,071 00 | Add | 441,929 00 | 2,000,000 00 |
| Clare | 4,187 | 339,201.73 | 2,377,681 00 | 1,889,078 00 | Add | 610,922 00 | 2,500,000 00 |
| Clinton | 27,534 | 361,235.53 | 16,631,293 00 | 15,298,500 00 | Add | 701,500 00 | 16,000,000 00 |
| Crawford | 1,159 | 252,788.00 | 935,244 05 | 925,940 35 | Add | 274,059 65 | 1,200,000 00 |
| Delta | 6,812 | No report. | ---------- | ---------- | Add | 2,500,000 00 | 2,500,000 00 |
| Eaton | 31,223 | 358,806.58 | 12,562,796 00 | 12,000,000 00 | Add | 4,000,000 00 | 16,000,000 00 |
| Emmet | 6,640 | 191,714.00 | 825,893 00 | 836,393 00 | Add | 1,163,607 00 | 2,000,000 00 |
| Genesee | 39,219 | 402,015.00 | 19,166,661 00 | 19,115,427 71 | Add | 1,884,572 29 | 21,000,000 00 |
| Gladwin | 1,127 | 305,912.19 | 1,022,900 00 | 1,059,095 00 | Add | 140,905 00 | 1,200,000 00 |
| Grand Traverse | 8,422 | 279,598.79 | 2,439,964 00 | 2,525,875 00 | Add | 474,125 00 | 3,000,000 00 |
| Gratiot | 21,237 | 357,607.00 | 7,126,921 00 | 3,500,000 00 | Add | 3,500,000 00 | 7,000,000 00 |
| Hillsdale | 32,726 | 375,911.00 | 17,912,619 00 | 18,013,234 00 | Add | 2,986,766 00 | 21,000,000 00 |
| Houghton | 22,473 | 411,710.75 | 1,619,589 00 | 1,619,589 00 | Add | 880,411 00 | 2,500,000 00 |
| Huron | 20,089 | 510,891.11 | 4,561,982 00 | 4,661,982 00 | Add | 338,018 00 | 5,000,000 00 |
| Ingham | 33,677 | 343,333.57 | 15,844,318 00 | 10,942,200 00 | Add | 5,057,800 00 | 16,000,000 00 |
| Ionia | 33,872 | 361,504.23 | 15,480,291 00 | 14,930,751 00 | Add | 1,069,249 00 | 16,000,000 00 |
| Iosco | 6,873 | 245,870.47 | 1,102,791 59 | 1,162,000 00 | Add | 838,000 00 | 2,000,000 00 |
| Isabella | 12,159 | 354,086.79 | 3,691,736 00 | 3,100,000 00 | Add | 900,000 00 | 4,000,000 00 |
| Isle Royal | 55 | No report. | ---------- | ---------- | Add | 100,000 00 | 100,000 00 |
| Jackson | 42,031 | 431,641.60 | 8,872,448 00 | 9,255,301 00 | Add | 17,744,699 00 | 27,000,000 00 |
| Kalamazoo | 34,342 | 349,793.00 | 18,901,030 00 | 19,084,537 00 | Add | 3,915,463 00 | 23,000,000 00 |
| Kalkaska | 2,937 | 330,705.52 | 2,475,991 62 | 2,480,307 00 | Add | 19,693 00 | 2,500,000 00 |
| Kent | 73,252 | 532,885.00 | 18,016,252 00 | 18,013,210 00 | Add | 14,986,790 00 | 33,000,000 00 |
| Keweenaw | 4,270 | 203,570.23 | 619,263 13 | 738,199 13 | Add | 61,800 87 | 800,000 00 |
| Lake | 3,253 | 344,249.03 | 1,921,042 00 | 1,826,202 00 | Add | 173,798 00 | 2,000,000 00 |
| Lapeer | 30,138 | 412,392.00 | 12,136,504 00 | 12,135,000 00 | Add | 865,000 00 | 13,000,000 00 |
| Leelanaw | 6,253 | 183,231.79 | 693,971 00 | 774,034 00 | Add | 225,966 00 | 1,000,000 00 |

*Statement Showing Population, etc.—(Continued.)*

| COUNTIES. | Population, 1880. | No. of Acres of Land Assessed in 1881. | Aggregate of Real and Personal Estate, as Assessed in 1881. | Aggregate of Real and Personal Estate, as Equalized by Boards of Supervisors 1881. | Amount Added or Deducted by State Board of Equalization. | | Aggregate of Real and Personal Estate, as Equalized by State Board of Equalization for 1881. |
|---|---|---|---|---|---|---|---|
| Lenawee | 48,343 | 463,836.00 | 26,837,269 00 | 27,045,964 00 | Add | 454,036 00 | 27,500,000 00 |
| Livingston | 22,251 | 362,262.00 | 12,355,417 00 | 9,338,410 00 | Add | 5,661,590 00 | 15,000,000 00 |
| Mackinac | 2,902 | 293,151.33 | 1,403,955 71 | 1,403,955 71 | Add | 1,096,044 29 | 2,500,000 00 |
| Macomb | 31,627 | 296,055.00 | 16,010,686 00 | 16,000,000 00 | Ded. | 1,000,000 00 | 15,000,000 00 |
| Manistee | 12,533 | 312,024.07 | 1 686,782 00 | 1,691,250 00 | Add | 1,808,750 00 | 3,500,000 00 |
| Manitou | 1,334 | No report. | ---------- | ---------- | Add | 250,000 00 | 250,000 00 |
| Marquette | 25,393 | 1,503,792.11 | 3,121,480 00 | 2,904,940 00 | Add | 2,095,060 00 | 5,000,000 00 |
| Mason | 10,063 | 285,842.93 | 3,165,244 80 | 3,165,244 80 | Ded. | 165,244 80 | 3,000,000 00 |
| Mecosta | 13,973 | 343,773.00 | 2,888,075 80 | 3,047,933 80 | Add | 452,066 20 | 3,500,000 00 |
| Menominee | 11,988 | 722,624.44 | 1,757,862 25 | 1,757,862 25 | Add | 742,137 75 | 2,500,000 00 |
| Midland | 6,894 | 322,206.92 | 2,113,221 00 | 2,009,863 00 | Add | 990,137 00 | 3,000,000 00 |
| Missaukee | 1,553 | 326,990.86 | 1,519,558 44 | 1,537,558 44 | Add | 262,441 56 | 1,800,000 00 |
| Monroe | 33,623 | 351,314.00 | 14,952,990 00 | 15,213,276 50 | Add | 786,723 50 | 16,000,000 00 |
| Montcalm | 33,148 | 446,517.00 | 9,366,171 00 | 8,490,000 00 | Add | 1,010,000 00 | 9,500,000 00 |
| Montmorency | gg ..... | 239,347.20 | 1,211,247 00 | 1,202,873 00 | Add | 47,127 00 | 1,250,000 00 |
| Muskegon | 26,586 | 279,236.29 | 3,586,559 00 | 3,320,102 25 | Add | 3,179,897 75 | 6,500,000 00 |
| Newaygo | 14,688 | 527,704.00 | 2,508,063 00 | 2,146,292 00 | Add | 1,853,708 00 | 4,000,000 00 |
| Oakland | 41,537 | 540,520.00 | 24,432,277 00 | 23,505,277 00 | Add | 2,744,723 00 | 26,250,000 00 |
| Oceana | 11,699 | 333,316.29 | 1,736,393 00 | 1,775,593 00 | Add | 1,224,407 00 | 3,000,000 00 |
| Ogemaw | 1,914 | 319,190.02 | 905,693 01 | 1,116,933 32 | Add | 383,066 68 | 1,500,000 00 |
| Ontonagon | 2,565 | 739,809.29 | 1,414,972 09 | 1,021,558 00 | Add | 978,442 00 | 2,000,000 00 |
| Osceola | 10,777 | 359,177.00 | 1,897,220 00 | 1,907,220 00 | Add | 592,780 00 | 2,500,000 00 |
| Oscoda | 467 | 220,637.60 | 749,468 00 | 749,468 00 | Add | 250,532 00 | 1,000,000 00 |
| Otsego | 1,974 | 302,486.00 | 1,102,548 00 | 1,119,948 00 | Add | 380,052 00 | 1,500,000 00 |
| Ottawa | 33,125 | 341,605.49 | 6,833,067 00 | 6,316,619 00 | Add | 2,183,381 00 | 8,500,000 00 |
| Presque Isle | 3,113 | 264,910.34 | 1,029,825 99 | 1,029,825 99 | Add | 220,174 01 | 1,250,000 00 |
| Roscommon | 1,459 | 278,023.62 | 1,175,732 14 | 1,076,132 14 | Add | 423,867 86 | 1,500,000 00 |
| Saginaw | 59,095 | 507,549.02 | 20,914,101 00 | 19,936,030 03 | Add | 5,063,969 97 | 25,000,000 00 |
| Sanilac | 26,341 | 595,742.61 | 3,899,273 00 | 3,906,254 00 | Add | 1,093,746 00 | 5,000,000 00 |
| Schoolcraft | 1,575 | 725,125.41 | 2,481,034 41 | 1,934,705 00 | Add | 565,295 00 | 2,500,000 00 |
| Shiawassee | 27,059 | 336,715.27 | 11,937,044 00 | 11,010,000 00 | Add | 2,490,000 00 | 13,500,000 00 |
| St. Clair | 46,197 | 432,464.00 | 13,653,363 00 | 11,141,078 00 | Add | 3,858,922 00 | 15,000,000 00 |
| St. Joseph | 26,626 | 312,365.00 | 15,994,663 00 | 16,103,848 00 | Add | 1,896,152 00 | 18,000,000 00 |
| Tuscola | 25,739 | 501,006.00 | 7,712,647 00 | 8,156,358 00 | Add | 843,642 00 | 9,000,000 00 |
| Van Buren | 30,807 | 384,684.21 | 12,697,433 00 | 12,000,000 00 | Add | 2,000,000 00 | 14,000,000 00 |
| Washtenaw | 41,848 | 431,493.19 | 29,024,665 00 | 30,000,000 00 | ---------- | ---------- | 30,000,000 00 |
| Wayne | 166,426 | 368,415.00 | 110,693,130 00 | 117,839,593 00 | Add | 12,160,407 00 | 130,000,000 00 |
| Wexford | 6,815 | 336,753.80 | 1,935,864 00 | 1,822,901 50 | Add | 1,177,098 50 | 3,000,000 00 |
| Totals | 1,636,335 | 29,806,820.20 | $669,344,283 55 | $654,005,885 42 | ---------- | ---------- | $810,000,000 00 |

(ff) Includes Montmorency.

(gg) Included in Alpena.

Having completed the business which had called them together, at 11:30 the Board adjourned *sine die*.

H. R. PRATT,
*Secretary of State Board of Equalization.*

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We, Moreau S. Crosby, Chairman, and H. R. Pratt, Secretary of the State Board of Equalization, do hereby certify that the foregoing is a correct record of the proceedings of the State Board of Equalization at its meeting at the Capitol, in the city of Lansing, on the 15th, 16th, 17th, 18th and 19th days of August, 1881.

MOREAU S. CROSBY,
*Lieutenant Governor and Chairman of State Board of Equalization.*
H. R. PRATT,
*Secretary of State Board of Equalization.*

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## ALCONA COUNTY.

[Written Statement by Geo. Rutson.]

*To the Honorable State Board of Equalization:*

GENTLEMEN:—The property of the County of Alcona consists principally of lands located as pine lands, and its value depends on the amount of pine timber thereon. After the pine is cut only a small proportion of these lands have any market value, proof of which lies in the fact that the owners allow a large amount of stripped lands to be bid in by the State for taxes—considering that they are not worth the taxes assessed against them.

It is estimated that during the last five years fully four hundred millions of feet of pine timber have been cut from lands in Alcona county, of which amount not more than seventy millions have been manufactured into lumber by the mills in the county—the balance has been cut in the shape of long timber, which has been hauled to the lake and rafted and towed to other localities to be manufactured—and of logs floated down the Au Sable and Thunder Bay rivers and their tributaries, to be manufactured at the mills in the adjoining counties of Iosco and Alpena, so that after the pine is cut we derive but little benefit by assessing lumber made therefrom as personal property.

Only one small mill has been built in this county during the past five years. and the others (four in number) are annually declining for want of stock, one will be removed to an adjoining county this fall.

On account of the increased and constantly increasing risk of destruction or damage from fire, lumber operations are being pushed with greater activity than ever before, one firm alone having cut over eighty millions during the past year, and they intend to continue their operations on this, if not a larger, scale until their pine is exhausted.

The assessed valuation of the resident property of Alcona county for 1877 was $207,864, in 1881 it was $343,030, showing a gain in resident property in five years of only $135,166, against a loss in the same period of over a million of dollars on account of pine cut and removed, this estimate being made at a low valuation for stumpage.

Before the assessment was made this spring our supervisors met and agreed to assess the property in their respective townships at a true cash value. This has certainly been done. A great many of our property owners express the opinion that the value of the property has been over-estimated and offer to sell out for less than the assessed value.

It has been the frequently expressed opinion of a number of our largest taxpayers that our county has borne more than an equitable burden of State tax. We cannot determine the accuracy of this opinion by comparing our apportionment with the apportionment of every other county in the State, but we can form some idea as to whether we have been discriminated against by comparing the amount of State tax paid by our county, and the amount paid by adjoining counties. For instance, the total assessed valuation of the county of Alpena for the years 1877–'78–'79–'80 and '81 is $14,845,989.50; for the same period the total assessed valuation of the county of Alcona is $13,281,-655.17, leaving the valuation of Alcona county $1,563,324 less than Alpena county, and yet we have paid the largest amount into the State Treasury.

For proof of the above I will submit a tabulated statement of the assessed valuation of each of the above-named counties for the last five years, as made by the supervisors of the several townships thereof, and which are hereto annexed.

From the foregoing statement of facts, I submit for the consideration of this honorable Board the following deductions:

*First,*—That the value of the property of Alcona county consists almost entirely of pine lands, and that this is being rapidly removed beyond the reach of taxation in our county.

*Second,*—That the increase in value by improvements are almost nothing in comparison with the decrease caused by removal of timber, and the destruction of and damage thereto, by fire.

*Third,*—That our property is assessed at its full cash value.

*Fourth,*—That our county has heretofore paid more than its equitable proportion of State tax.

All of which is respectfully submitted.

GEO. RUTSON.

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ALCONA COUNTY.

*As Assessed by Supervisors.*

FOR 1877.

| TOWNSHIPS. | Personal Estate. | Real Estate. | Total. |
|---|---|---|---|
| Harrisville | $14,315 00 | $1,453,886 00 | $1,468,201 00 |
| Alcona | 47,680 00 | 821,107 00 | 868,787 00 |
| Greenbush | 700 00 | 334,567 50 | 335,267 50 |
| Totals | $62,695 00 | $2,609,560 50 | $2,672,255 50 |

FOR 1878.

| TOWNSHIPS. | Personal Estate. | Real Estate. | Total. |
|---|---|---|---|
| Greenbush | $3,350 00 | $330,457 00 | $333,807 00 |
| Comins | 1,230 00 | 778,109 00 | 779,339 00 |
| Alcona | 16,660 00 | 707,201 00 | 723,861 00 |
| Harrisville | 58,355 00 | 586,513 00 | 644,868 00 |
| Totals | $79,595 00 | $2,402,280 00 | $2,481,875 00 |

FOR 1879.

| | | | |
|---|---|---|---|
| Comins | $2,420 00 | $724,155 00 | $726,575 00 |
| Greenbush | 3,425 00 | 298,824 67 | 302,249 67 |
| Alcona | 42,121 50 | 678,778 50 | 720,900 00 |
| Harrisville | 45,195 00 | 587,387 00 | 632,582 00 |
| Totals | $93,161 50 | $2,289,145 17 | $2,382,306 67 |

FOR 1880.

| | | | |
|---|---|---|---|
| Alcona | $78,945 00 | $917,636 00 | $996,581 00 |
| Comins | 2,926 00 | 938,554 00 | 941,480 00 |
| Greenbush | 3,630 00 | 333,944 00 | 337,574 00 |
| Harrisville | 44,648 00 | 932,408 00 | 977,056 00 |
| Totals | $130,149 00 | $3,122,542 00 | $3,252,691 00 |

FOR 1881.

| | | | |
|---|---|---|---|
| Total of Alcona County | $147,537 00 | $2,344,990 00 | $2,492,527 00 |

The township of Comins comprised the entire county of Oscoda, which was organized into a separate county at the last session of the Legislature.

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## ALPENA COUNTY.

*As Assessed and as Equalized by the Board of Supervisors.*

| 1877. | Real Estate. | Personal. | Total. | Deduction. | Addition. | As Equalized. |
|---|---|---|---|---|---|---|
| City of Alpena | $510,200 00 | $185,400 00 | ..... | ..... | $8,850 00 | $704,450 00 |
| Township of Alpena | 77,603 00 | 13,770 00 | ..... | $16,373 00 | ..... | 75,000 00 |
| Township of Long Rapids | 309,768 00 | 11,432 00 | ..... | 21,200 00 | ..... | 300,000 00 |
| Township of Ossineke | 560,937 00 | 21,689 00 | ..... | 262,626 00 | ..... | 340,000 00 |
| Township of Wilson | 316,053 00 | 7,249 00 | ..... | 23,302 00 | ..... | 300,000 00 |
| Total | $1,794,561 00 | $239,540 00 | $2,034,101 00 | $323,501 00 | $8,850 00 | $711,950 00 |

| 1878. | Real Estate. | Personal. | Total. | Deduction. | Addition. | As Equalized. |
|---|---|---|---|---|---|---|
| City of Alpena | $492,060 00 | $264,400 00 | $756,460 00 | ..... | ..... | $756,460 00 |
| Township of Alpena | 85,814 00 | 16,020 00 | 101,834 00 | $21,834 00 | ..... | 80,000 00 |
| Township of Long Rapids | 302,277 00 | 15,873 00 | 316,150 00 | ..... | ..... | 316,150 00 |
| Township of Ossineke | 333,561 00 | 24,650 00 | 358,211 00 | ..... | ..... | 358,211 00 |
| Township of Wilson | 308,373 00 | 7,497 00 | 315,870 00 | ..... | ..... | 315,870 00 |
| Total | $1,522,085 00 | $328,440 00 | $1,848,525 00 | $21,834 00 | ..... | $1,826,691 00 |
| 1879. | | | | | | |
| City of Alpena | $1,524,675 00 | $398,100 00 | $1,922,775 00 | $522,775 00 | ..... | $1,400,000 00 |
| Township of Alpena | 68,562 00 | 14,255 00 | 82,817 00 | ..... | $17,183 00 | 100,000 00 |
| Township of Long Rapids | 471,021 00 | 17,010 00 | 488,031 00 | ..... | 161,969 00 | 650,000 00 |
| Township of Ossineke | 521,897 00 | 22,090 00 | 543,987 00 | ..... | 56,013 00 | 600,000 00 |
| Township of Wilson | 487,810 00 | 12,571 00 | 500,281 00 | ..... | 149,719 00 | 650,000 00 |
| Total | $2,873,465 00 | $664,026 00 | $3,537,891 00 | $522,775 00 | ..... | $3,400,000 00 |
| 1880. | | | | | | |
| City of Alpena | $1,252,562 50 | $730,325 00 | $1,982,887 50 | $582,887 50 | ..... | $1,400,000 00 |
| Township of Alpena | 81,454 00 | 15,385 00 | 96,839 00 | ..... | 3,161 00 | 100,000 00 |
| Township of Long Rapids | 501,446 00 | 17,752 00 | 519,198 00 | ..... | 155,802 00 | 675,000 00 |
| Township of Ossineke | 490,122 00 | 11,070 00 | 501,192 00 | ..... | 173,808 00 | 675,000 00 |
| Township of Wilson | 514,186 00 | 11,265 00 | 525,451 00 | ..... | 74,549 00 | 600,000 00 |
| Total | $2,839,770 50 | $785,797 00 | $3,625,567 50 | ..... | ..... | ..... |
| 1881. | | | | | | |
| City of Alpena | $1,208,662 50 | $988,675 00 | $2,149,337 50 | $612,337 50 | ..... | $1,585,000 00 |
| Township of Alpena | 80,096 00 | 13,175 00 | 93,271 00 | ..... | $16,729 00 | 110,000 00 |
| Township of Long Rapids | 808,580 00 | 18,923 00 | 827,503 00 | 537,503 00 | ..... | 290,000 00 |
| Township of Ossineke | 416,940 00 | 6,755 00 | 423,695 00 | 198,695 00 | ..... | 225,000 00 |
| Township of Wilson | 70,231 00 | 6,669 00 | 76,900 00 | ..... | 79,100 00 | 156,000 00 |
| Township of Green | 173,680 00 | 5,520 00 | 179,200 00 | 45,200 00 | ..... | 134,000 00 |
| Total | $3,539,587 50 | $1,039,717 00 | $3,799,906 50 | $1,398,738 50 | $95,829 00 | $3,500,000 00 |

## STATEMENTS OF DELEGATES.

### ALPENA COUNTY.

JAS. A. CASE:—I have no complaint to make of the action of the Board of Equalization five years ago. At that time this county was equalized at [1]$1,500,000. It then included the county of Montmorency, which has since been detached. I speak in behalf of the county of Alpena as it now stands. The county of Alpena is a lumbering county, and of course the cutting of pine timber is decreasing the value. To-day there is very little standing pine in the county, the most that remains in that district is in Alcona and Montmorency counties. The county has probably been depleted of two hundred millions at least. The increase has been in the city of Alpena; and no farming improvements have been made to offset the removal of the pine. We have

[1] Table 81.

no railroad facilities; our lands are not easy of access; settlements are not progressing very rapidly, and consequently our valuation is not increasing very rapidly in that direction. There are five townships. Of these, Long Rapids, Wilson and Green contain large areas of excellent farming lands, and some well improved farms. They contain about 150,000 acres of taxable lands. There are large tracts of stripped pine lands, some swamps and waste lands. The townships of Ossineke and Alpena, containing about 25,000 acres of assessed lands, consist largely of pine plains and rocky land, and are of little value. Lands in those townships are assessed at one dollar per acre, the parties agreeing to pay taxes at that rate, and at the same time they are keeping those lands at fifty cents; but they would pay the taxes if they were not raised above a dollar. The first three towns are assessed at four dollars an acre, and we consider that high enough. Five years ago the counties of Alpena and Montmorency were assessed at $1,500,000; Montmorency has been detached, and it occurs to me that Alpena county cannot be assessed as equalized by the Board of Supervisors.

I find, upon comparison with other counties, that our personal tax is very high,—$1,039,717, with a population of about 8,000. Muskegon is about $900,000, with a population of about 26,000. We have one hundred and eighteen dollars and some cents per head, ranking as the third county in the State. All we ask is a fair equalization.

### BARRY COUNTY.

JOHN DAWSON:—Barry county is composed of sixteen townships. Its interests are exclusively agricultural. It has no other interest amounting to anything in particular. There is only one railroad running through the county, the Grand River Valley, consequently we think that we are laboring under a little disadvantage on account of transportation. We think we pay higher rates of freight than counties adjoining us. The land is varied: we have some very good and some very poor. We have one small city—Hastings—composed of four wards; it ought to have remained a village. We have three villages. We think the four southern townships are rather the best. A year ago and this year the Board of Supervisors assessed the property, as near as possible, at its true cash value. The farming lands are assessed from one to sixty-five dollars an acre. We stand as equalized by the State Board in 1876 at $10,000,000[1]; as assessed this year and equalized by our board of supervisors, at $11,305,291[2]. There was some complaint on the Board of the low valuation of personal property in our county, but capitalists are not very plentiful. A large amount of money from other counties in the State is loaned in our county. A great amount of land is mortgaged, and that accounts for our somewhat low valuation of property. We have some lands that are very good and some that are very poor. We want to bear our proportion of the State's burden and no more.

### BAY COUNTY.

IRA E. SWART:—I want to call attention to a little matter in the township of Frankenlust, which has been detached from Saginaw and attached to Bay by the last Legislature. There are about twenty-four sections, and it has been a question with us whether it was with Bay county or Saginaw county. The

[1] Table 90.
[2] Table 6.

bill does not take effect until the 11th of next month, consequently it does not belong to us yet; and if you equalize it with Saginaw county they will have the State tax to pay for five years to come. It is part of the township of Kochville. In regard to Bay county, we are not very poor up there. We are assessed at $12,901,183[1], and I did not come here to tell you Bay county is not good for anything. All we want is to present a few facts. Our county contains about 487,000 acres of land, about 300,000 of which was formerly pine and hemlock, 75,000 prairie and plains, and the balance is as good farming land as there is in Michigan, but is very sparely cleared up as yet. In 1876 it was estimated that there were from 350,000,000 to 400,000,000 of pine, and to-day we have not more than 50,000,000 left. That, we calculate, has depreciated the value of our county very materially. We have been increasing in value in other respects. Bay City and West Bay City have grown in value to a great extent, consequently we expect to be raised from what our valuation was in 1876. We have assessed our lands at an average of five dollars and seventy-seven cents[2] an acre. My opinion is that four dollars an acre, taking the lands right through outside of the cities, would be a good valuation.

CHAS. F. BRAMANN:—Five years ago we were equalized by our board of supervisors at $3,168,000[3], which was about a third of the cash valuation, making the cash valuation $9,504,000. We are now assessed at the true cash value. While Bay City and West Bay City have increased in value in the past five years, the balance of the county has decreased. We have thousands of acres of stripped pine lands paying no taxes, but being carried by the State year after year. We have good farming lands were they improved and developed; but the main portion of our inhabitants follow the occupation of lumbering, or the manufacture of lumber, the most of which is rafted in from other counties. In view of the facts I have stated, and the fact that we consider the equalization of five years ago was excessive, we consider that if it were equalized at the same now it would be ample. Bay City pays sixty-two per cent of the taxes of the county.

## BERRIEN COUNTY.

[Written Statement by Chas. F. Howe.]

*Mr. Chairman and Gentlemen of the Board of Equalization of the State of Michigan:*

I have been chosen by the Board of Supervisors of Berrien county to represent them before this Board. The people of Berrien county have no desire to shirk any of the burdens of taxation. They are willing to bear their just proportion, no more, and expect no less, and only conceive it necessary that all the facts be fairly laid before your honorable Board to receive at your hands equal and exact justice. Berrien county has an area of about three hundred and fifty-two thousand four hundred and eighty-nine acres[4], and, according to the statistics of the Supervisors for the year 1880, one hundred and fifty-eight thousand acres are under cultivation; this leaves near two hundred thousand acres unimproved, which is composed of timbered, marsh, and swamp land. Berrien county has a considerable proportion of level, wet, and swampy land,

[1] Table No 91.
[2] Table No 83.
[3] Table No 95.
[4] Table No 91.

but the number of acres I am unable to report. Berrien county is bounded on the northwest by Lake Michigan, and has a coast line of forty-five miles in length; and parallel with this coast line, and distant from one to five miles, is a large tract of level, wet land, through the entire western portion of the county. The St. Joseph river flows through Berrien county for a distance of over fifty miles, and considerable wet land exists on one side or the other, nearly the whole length of the river; also the Paw Paw and Galien rivers, and the Pipestone and McCoy's creeks, have considerable wet land along their borders. I do not think it an over-estimate to say that fully one half of the unimproved land in Berrien county is of a wet, swampy nature, and of little value at present, and cannot be of much value until it has been drained, which will require years of toil, and an expenditure of large amounts of money. A considerable proportion (about one-fourth) of this wet land is not in position to be drained. The timbered land of Berrien county has been stripped of all the valuable timber, such as black walnut, oak, ash, poplar, etc., and near saw-mills and river banks elm, basswood, beech, maple, and any other timber that has a market value has been taken from the land, leaving it of little value as timbered land, and of no other value until improved. The improved lands of Berrien county are of every conceivable character, from the lightest sand to the heaviest clay soils, a small proportion of prairie (only about three thousand acres), and a large proportion of what is called timbered lands and oak openings; and will perhaps compare favorably with the same variety of soils in the other southwestern counties. The bluff lands along the St. Joseph and other streams, are lessened in value by washing into ravines. This evil increases as the country becomes more improved, and has in several instances caused the vacating of highways which were originally located a considerable distance from the streams. The lake shore region is of a light drift sand formation, and was at one time considered almost worthless until this part of the county was found to be in the Michigan fruit belt, when land arose to fabulous prices, and continued so for several years. Disease and extremely cold winters have destroyed the peach interest, and a large proportion of the so-called peach lands have passed into the hands of insurance companies, loan and trust companies, and other hands by the foreclosure of mortgages, and are on the market below the value of adjacent farm lands. While all farm and village property has depreciated in the last five years, none has depreciated more than lands in the fruit belt, except village property in certain localities. I wish to call your attention to the peculiar situation of five townships in the western part of Berrien county. In the year 1869 they voted aid to what is now called the Chicago & West Michigan Railroad to the amount of ninety-seven thousand five hundred dollars. This amount of bonds was passed over to the railroad company and by the railroad company into third parties hands before the law which gave townships the power to issue bonds was declared unconstitutional by the courts. This large amount has been in litigation for several years, and judgments stand against those townships; and the principal, accumulated interest at ten per cent and necessarily large amount of costs, are a cloud upon the title of all the real estate in those townships, to fully twenty-five per cent of their value, as actual sales on the line of adjoining townships will show. I cannot say, whether in my opinion, the valuation of Berrien county should be raised or lowered; because, I do not know what this Board will assume as the aggregate valuation, of the taxable property of the State of Michigan. If the aggregate should be determined at six hundred and thirty

millions as at present, then Berrien county as equalized, and reported to this Board for the present year, at thirteen millions forty-one thousand nine hundred and thirty-seven dollars[1], is in my opinion too high. The people of Berrien county are of the opinion that for the past five years they have paid more than their just proportion of the taxation of the State of Michigan. Berrien county was equalized in 1876 at sixteen million twenty-five thousand dollars[2]. That is over five millions higher than the adjoining county of Van Buren, and yet Van Buren county has a larger area than Berrien county, and is just about equal to Berrien county in farm products and live stock. Allegan, another southwestern county, has an acreage one-half larger than Berrien county; her farm products and live stock, in most instances, are one-half larger than those of Berrien county; and yet Allegan was equalized at over three millions less than Berrien county. Also Ingham, Eaton, Barry, and Livingston counties equal or exceed Berrien county in area. Farm products and live stock have been equalized from two to six millions less than Berrien county. Gentlemen of the Board, the statistics taken by the Supervisors and other data at your command, will enable you to do justice to every county in the State, and the people of the county of Berrien have confidence in you that you will assign to them no more than their just proportion of the burdens of taxation for the next five years. Gentlemen, I thank you for your kind attention.

### BRANCH COUNTY.

G. W. VAN AIKEN:—Branch is an agricultural county; one of the oldest, and one of the smallest, in the State. We have a very good county, with some as good farming land as any in Michigan; we have also some poor land. We are willing to pay our full share of the State taxes, and we think we have done so. We thought we were equalized a little too high at the last equalization. Our railroad facilities are not as good as many other counties; we have no competing points at all; we have no manufactures of any consequence; our agricultural lands are not improving like other lands in the central portion of the State, and we do not increase in our products as many of them do; our farm buildings are old, and many of them are not kept in repair and depreciate in value. We believe that we should bear a proportion with other counties whose income and products bear some proportion to ours. In many of them the products are larger than ours. Eaton, Ingham, and Ionia produce more wheat, more horses, more cows, more cattle, more pounds of wool, than Branch, and we believe that an agricultural county with the same advantages should be taxed in similar approximate proportion to its income, as farms as a rule are valuable for the amount of income that can be derived from them.

### CALHOUN COUNTY.

CHAS. E. DARROW:—I presume the Board of Supervisors of Calhoun do not expect me to plead poverty, and I am quite certain this Board would not care to listen to any statements of that nature. Prior to 1880 the custom was to assess at about one-third the cash value.—from thirty-three and one-third per cent up to forty-five. Last fall the Board concluded to assess the county the following year at its cash value. Early in April it was resolved that the county should be raised to at least two and a half times the assessment of the

[1] Table 9.
[2] Table 90.

year before. At the fall meeting of the Board we found that all the townships had complied, with the exception of one that was assessed upon the old plan. Upon this plan we raised the county from about $8,000,000 to a trifle over $20,000,000. This spring we found that the county had fallen off a trifle; that it did not quite equalize up to the valuation of the previous year. The principal cause was some of the supervisors had over-assessed real estate throughout the county. Some was assessed for just twice what it would sell for in the market. To make as good showing as we could before this board, five per cent was added to the assessed valuation of the county this spring in order that it might not fall below the prior assessment, and that brings us to a trifle over $20,000,000. It is our opinion that that is a close approximation to the real value of Calhoun county.

### CASS COUNTY.

CHAS. H. MORTON:—Ten years ago Cass county was equalized with Berrien county at about $16,000,000, and proportionately high as compared with other surrounding counties. The citizens felt that this was extremely high. Five years ago we were reduced, as compared with Berrien, about one million, and they still feel that as compared with Berrien and our surrounding counties we are assessed very high. I am not here to plead poverty. We have a very nice little county, dotted here and there with fine farms, yet we have our proportion of swamp and poor lands—a large proportion. In one respect we are unfortunately located, not as affects the value of the county particularly, but because our personal property, or the profits of our produce, are continually flowing into the coffers of adjoining counties. On the north we have the village of Decatur within three miles of the county line, attracting one-half of its trade from Cass county. On the east is Three Rivers. Constantine, within about four miles of one corner of the county, draws a large portion of trade; while in Indiana, on the South, are Bristol, Elkhart, Mishawaka, and South Bend, attracting the entire trade, almost, from the southern tier of townships; and on the west Niles attracts the entire trade of three or four townships; while in our county we have but few little villages, none of them drawing any trade of any extent outside of the county. The city of Dowagiac, it is true, is incorporated as a city, but I suppose it was in consequence of the intense desire of its inhabitants to live in a city more than because of its wealth or population, which is less than 3,000. These surrounding villages not only draw the profits of the produce of our soil, but they turn round and loan the money to our citizens at from eight to ten per cent interest, as the records will show. I have examined six out of 42 of those records, and find that Van Buren county has mortgages upon the farms of Cass county to the amount of $27,000, Berrien county to the amount of $42,000, and St. Joseph to the amount of $55,040. Parties outside of Cass county have mortgage claims against our county amounting to $268,640 upon these six records alone. I do not contend that this Board can consider that indebtedness in determining the value of our real estate, but I do contend that it tends to show where our personal wealth goes to. The chief products of Berrien and Cass counties are wool, pork, wheat, and products of factories. The produce of Cass county for the year 1873 amounted to $2,437,113, counting wheat at $1.25 per bushel, pork at three cents per pound, and wool at 30 cents; figuring the same in both counties, Berrien county the same time produced $3,618,558. I insist that Berrien county should be assessed at least $2,000,000 higher than Cass county. We have two national

banks, with an aggregate capital of only $100,000, besides a private bank with a capital of $50,000, while in Berrien county the aggregate capital of the national banks alone is $250,000, besides quite an extensive firm that is going into the banking business at Benton Harbor. Two years ago the county was assessed at one-third its cash value by the Board of Supervisors. They then decided to assess at the true cash value, and went to the extreme last year and this, and assessed too high, in my judgment. I could name farm after farm that will not sell for what it is assessed at. I have here an affidavit from a gentleman, stating that he has land that was assessed in 1880 higher than he has been able to sell it for, although it has been on the market. What we ask of this board is that you will equalize us as assessed, or at least no higher; and if that is done the aggregate of the State should be raised. If you multiply the assessment when assessed at one-third the cash value by three you still have a less amount by over two millions than it is equalized at this year. We have, comparatively, no manufacturing interests. In conclusion, I ask that you will consider the location of our county as to trade, and also compare its products with the products of the counties surrounding it. In regard to the pork trade, as is well known, that has depreciated largely in consequence of the hog cholera.

### CHEBOYGAN COUNTY.

ROBERT IANSON:—We ask nothing but just and fair dealing. Our assessment represents the full and fair cash value of the county. There is little difference in the several townships except what would be accounted for by difference of location, improvements, etc. A considerable portion of our land is plain, of little value for purposes of agriculture, or any other purpose that I know of. Another considerable portion is or was pine lands, from which the pine has been or is being rapidly cut off. Emmet county, adjoining us on the west, has a larger population per acre than Cheboygan; having about twenty-eight acres and a fraction to the inhabitant, Cheboygan county having sixty-three. Emmet county has a less proportion of plains than Cheboygan, I think; and yet in Cheboygan county the lands are assessed at $5.33 per acre, while in Emmet county they are assessed at $3.75.

### CLINTON COUNTY.

C. M. MERRILL:—We have sixteen townships. Of those, Watertown and Essex may be deemed first class farming lands. The townships of Bath, Victor, and Lebanon are less than medium; In fact, they may be called poor. The balance of the county is, perhaps, a medium class of farming lands. It is neither an old or a new county. In a large part of the county the stumps are barely out. We have only two villages of any consequence—St. Johns with 2,400 inhabitants, and Ovid with about 1,400. In 1871 and 1876 the State Board nearly doubled the assessed valuation of Clinton county. A year ago the assessors attempted to work a reform, and I take it that like Cass county they have gone to the highest extreme. In 1871 and 1876 the valuation as assessed was between four and five millions; now it is over sixteen. The people thought that in 1876 they were put plenty high enough by the State Board. They were put higher than other counties similarly situated. Shiawassee, a very similar county, was put lower. There was a very small difference between Clinton county and Ionia county,—the next county west. While Clinton county desires to pay its just proportion of the public burden,

it does not desire to be placed upon the assessment roll any higher, in proportion, than its neighbors. If the aggregate of the State is put anywhere near what it was five years ago, there should be a large deduction from the aggregate of the property in Clinton county. The real estate of Clinton county is assessed this year at an average of $39.51 per acre[1]. That includes a large amount of swamp lands. There is much waste land in the county. One-thirteenth or one-fourteenth of the whole county is swamp land. We have raised our assessment per acre from $10.00 in 1876 to $39.51 in 1881—much higher than in other counties. It is higher than Ionia county. It is about $12.00 higher than Shiawassee county. It is higher than Barry, Eaton or Lenawee counties. Our personal property is raised from $26.77 per capita in 1876[2] to $85.61 in 1881. That is all and perhaps more than the personal property in Clinton county. It represents every old wagon and every old horse. We have no extremely rich men in the county.

QUESTION. Is the assessment of $39.00 an acre a cash valuation?

ANSWER. It is. Many farms are assessed at more than their actual value.

### EATON COUNTY.

JOHN DOW:—I was in hopes when I came that all the counties had improved; but I find from the statements made that they are rather going down hill. As for Eaton county, we are improving; I did not come here to run down the county. A year ago we got out of the rut we had been in heretofore, and assessed at the cash value. The State had put us at $11,000,000 for the last ten years; but we concluded to equalize at $12,000,000. I think that is a little higher than it should be unless the total valuation is raised. We have paid about one and eight-tenths per cent of the state tax heretofore, and we are not dissatisfied; and I hope the Board will put us about where we stand now, or raise the total valuation and raise Eaton county in proportion.

### GENESEE COUNTY.

JAS. VAN VLEET:—It seems to me that the county of Genesee was equalized in 1876 higher than some other counties, and for the purpose of giving my reasons I have made a few figures. I find that Branch county, with 168,000 acres of improved land, is assessed at $22.48; Jackson county, with 251,077 acres of improved land, was assessed at $13.56 an acre; Livingston, 185,662 acres improved, assessed $28.63 an acre. These counties are all older and more improved than Genesee. These counties have decreased in their equalization from 1876 $49,973,000, while the counties of Clinton, Lapeer and Genesee have increased $13,948,927, being very much newer counties. Genesee county has as good farming lands as the adjoining counties, but not under as much cultivation. The manufacturing in the county is done mostly in lumber, which is nearly used up. In 1876 we had, in the city of Flint, fourteen saw mills, now but three; in 1876 we had six planing mills, now three; we also then had three woolen mills in the county, now but one; and almost all kinds of manufactures have decreased in the same proportion. Our assessments are made upon the basis of a fair selling price. I have made a memorandum of some sales made in the city of Flint in the past year that exceeded a thousand dollars:

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[1] Table No 83.
[2] Table No 82.

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|---|---|---|---|---|---|
| One sale at | $1,100 00— | Assessed at | $1,200 00 |
| " " " | 1,500 00— | " " | 1,300 00 |
| " " " | 5,000 00— | " " | 5,300 00 |
| " " " | 6,300 00— | " " | 6,500 00 |
| " " " | 5,500 00— | " " | 5,200 00 |

And our assessments are in the same proportion throughout the city, and, I have reason to believe, throughout the county. Our personal property is assessed at its full cash value. Our bank stock is assessed at par; and all moneys at interest are assessed the same.

### GRAND TRAVERSE COUNTY.

JOSEPH B. HAVILAND:—As for Grand Traverse county, we are a new county; and while we have some as good land as perhaps there is in the State, we have some very poor. In making up the equalization of our county bear in mind that we have upwards of 30,000 acres of stump and pine plains land; that our board assessed at about a dollar an acre; and many of those lands can be purchased for that to-day. After they are stripped of their pine the character of the soil is such that they are comparatively worthless; but the owners say, "If you will place a nominal value on them we will pay our taxes; but if they are assessed on the idea that we have made some money out of the pine, which was cut in previous years, we will not pay our taxes, but will let them go back to the State." We have, in the county, a large amount of railroad lands, which are offered for sale (the agricultural lands) at from six to ten dollars an acre, according to location. We have some vacant swamp lands that are unsold at a dollar and a quarter an acre; also some agricultural college lands. Now our average assessment is nearly seven dollars an acre. There is no use in comparing with other points in the State, for the Board have the facts before them; but I cannot see why in Jackson county the average is only about thirteen dollars an acre. Last spring our board of supervisors resolved that they would assess as near as possible at the true cash value, and I think they are as near as any others, and very much nearer than many counties. Our equalization by the Board of Supervisors in 1876 was $1,617,714; this year it is a little over $2,500,000. All we ask is that we be placed on the list at a fair valuation with our sister counties.

### GRATIOT COUNTY.

C. H. MORSE:—I am not here to say that Gratiot county is the richest county in the State—or the poorest. We have tried to improve it. One-half of Gratiot county, when as many years shall roll over it as have rolled over the southern counties, will be the peer of any county in the State; but at present it is low and wet, and our people are digging away as well as they can for an outlet. Just now the income to be derived from our lands is not very large. We had at one time a heavy sprinkling of pine: to-day we are literally without any. We had fine forests of oak and ash; but staves and the square timber business have cleaned those out. Now raids are organizing on our basswood and hard maple, which have heretofore counted as a portion of our wealth. So far as location is concerned a map of Michigan will show you what our facilities are for getting our products to market. Our business is almost entirely an agricultural one. Taking into consideration our stump and swamp lands I think, probably, we have come very close to a cash valuation in our assessment. If we could have known the policy of your Board in fixing

the aggregate of the State, we should have been better prepared to fix our own aggregate; but we show an advance of forty per cent from five years ago.

### HILLSDALE COUNTY.

WARREN A. DRAKE:—Hillsdale county has, until within the past three years, been assessed upon what was supposed to represent thirty-three or forty per cent of the true valuation. During the past three years we have endeavored to assess at the full cash value. In doing this we have not been able to bring the total valuation of the county quite up to the $20,025,000, upon which we have paid state taxes for the past five years. In the two wards which I have assessed the assessed valuation exceeds the conveyance prices by about three and one-fourth per cent. I am not certain whether this is true throughout the county. The testimony and the opinion of other supervisors is that they have assessed as high. In this way we have brought our total valuation to a little more than $18,000,000; and our board think if Hillsdale county was assessed by the State Board at $18,000,000 or $18,500,000, it would be equitable; that is, if the total of the State shall be equal to $630,000,000. We have our disadvantages. The population is not as great as it was in 1870,—not quite as much as it one year ago. Hillsdale county has contributed its share in developing the northern counties of the State. Hillsdale county has its share of swamp lands—perhaps just enough to show that it has its share of water. Of that we are proud; but still we like the dry lands better.

### HURON COUNTY.

[Written Statement by James Adams.]

It is now twenty years since Huron county was organized. It doubled its valuation, or nearly so, every five years since, notwithstanding it was burned over in the year 1871, destroying large quantities of valuable timber, which at that time alone gave value to our lands. The fire of 1871 made what we call "wind-fall" land of the greater portion of our county. Those lands are held in large quantities by single individuals, ranging from one thousand to twenty thousand acres. Those lands are not improved. The soil of a large portion of Huron county is good for agricultural purposes when drained, which adds much to the cost of reclaiming the land. Our county has steadily advanced in the past, and will, I think, in the future. I think we were justly equalized in the year 1876, and I hope we will be this year. Our State tax has never been felt by our settlers to be burdensome.

### INGHAM COUNTY.

O. M. BARNES:—I have some pride in saying that Ingham county is a good county; equal, though not superior to its neighbors. The counties of Barry, Eaton, Ingham, Clinton, most of Livingston, and some of Jackson are very similar. All I request of your honorable body is that you will not jump at conclusions in putting your figures upon the county of Ingham. The Board of Supervisors has assessed the property somewhat higher than formerly, at a little over $10,000,000. I see in your last equalization it was $13,000,000. I cannot state with any certainty what proportion of the value of the county is represented by the Board of Supervisors. So far as I know it is very near the actual value. Ingham county, according to acres and its state of development, is equal, I think, to any of its neighboring counties. It is a very small county, having but sixteen towns, of which four are fractional, which leaves the

county destitute of some twenty sections. We are from twelve to fifteen thousand acres short of being a full county—having sixteen towns. So far as the quality of the land is concerned, it is similar to its neighboring counties. Those towns on the south part of the county, adjoining Jackson, are quite similar to it; and so with those adjoining Eaton, Clinton and Livingston counties. There is considerable waste land. In the townships of Bunker Hill and Stockbridge there are large areas of swamp that have not had any particular value. Large tracts have been recorded as worth but little more, if anything, than ten shillings an acre, which the government originally charged for them; and considerable lots have changed hands at four and five dollars an acre. There are likewise large tracts of waste land in the northeast part of the county, and some in the western part. The central towns are more free from any such blemish than the others. The valuation put upon these lands by the Supervisors averages $27.65 per acre. In my judgment that is a pretty fair valuation. Ingham is almost wholly an agricultural county, and not as fully developed as many others. Indeed, it has until recently been regarded as one of the counties in the woods. Most of the central portion of the county was timbered land. Timbered counties develop more slowly than others. The farms are smaller and not so rapidly developed. Another fact: Look at the city of Lansing. The buildings—the structures that give Lansing its importance—are not assessable property, but belong to the State. In relation to the comparison which you may make between the personal property and the number of inhabitants, quite a portion of the population of Lansing—as an example, of course—is here in the prosecution of the State business. Their assessable property is largely in other localities, therefore I should not expect to find as much capital in proportion to the number of people as I would in other cities of the same size. I would be glad to see you assess this county at a fair rate, and raise other counties that are not assessed at their full cash value. Can it be that our land is worth $27.65 an acre and some other counties only $13.00 or $14.00? For instance, Jackson is worth $13.56. Assess us at what we really are worth.

## IONIA COUNTY.

CHAUNCEY WATERBURY:—The tax-payers of Ionia county have felt for the last ten years that the State Boards of Equalization gave them a prominence which might cause older and wealthier counties to feel a little jealousy. Five years ago the taxable property was equalized by the Board of Supervisors[1] at $4,309,308—about one-third of the taxable property, as estimated. In the spring of 1879 it was determined to assess both real and personal property at its real cash value, and in October it was equalized at $14,287,432. In October, 1880, it was equalized at $15,248,458, and last June it was equalized at $14,930,751[2], which placed all the table lands of Ionia county, exclusive of villages and cities, at an average of $32.62 per acre[3]. Ionia county, like Ingham and Clinton, and others centrally located, is composed of sixteen townships only. I believe they are all full. It is a purely agricultural county, and has but little manufacturing. There are saw mills, but they depend almost entirely for material upon logs floated in from outside the county. I think it will compare favorably in agriculture with almost any other county in the State of the

[1] Table No 90.
[2] Table No 91.
[3] Table No 83.

same number of townships. It has its full average in drawbacks. I fail to find any county in the State where Grand River goes through more gyrations than it does in Ionia county. In addition, we have a portion of Maple River; a portion of the Looking Glass; quite a large portion of the Flat River, and Prairie creek, with all the attendant high bluffs and marshes—some of them extending quite far back into the county. I wish to make a slight comparison with the counties contiguous to Ionia, commencing with Clinton on the east. I have had occasion to go through some of the townships, and after having done so it was a conundrum to me where the $4,500,000 of Ionia over Clinton in the equalization by the State Board in 1876 came from; I did not find it in the country, or in the commodious farm buildings. As to Eaton and Barry on the south, I am not personally familiar; although I have always understood they were good farming counties. Kent is composed of twenty-four townships. It is a large county. It has the city of Grand Rapids and large manufacturing interests, consequently there is not much comparison between Ionia and Kent.

SYLVESTER TAYLOR:—While I am of the opinion that we stand up high in our equalization by the Board of Supervisors at its last session, as well as by the State Board of Equalization in 1876, I do not think we are any too high. We have some splendid lands, and they are very productive. There has been a good deal of a race between our county and the county of Clinton; and when the Clinton county folks visit us they are apt to boast that they produce more wheat and are a better county; and the Ionia folks do the same when they visit them. There is also a race between us and Montcalm; but Montcalm is gaining on us on account of her having a larger territory; but her population is just about equal to ours. She has a good deal of splendid farming land; she is rich in timber, and a great deal of her lands are more valuable than the lands in Ionia; and yet, by the apportionment of 1876, she was put at $4,500,000, while Ionia is $14,000,000[1]. I think Ionia county has been fairly equalized upon about its cash value—not quite; I do not think any county is equalized up to the full cash value; but while it comes as near to it as any county, it is none too high; and all I ask is that other counties should be put upon the same rate.

### IOSCO COUNTY.

E. LAIDLAW:—We were satisfied as equalized in 1876. Our pine timber that gave value to our lands in the past is fast being removed, leaving us nothing but sand plains unfit for agricultural purposes. Large tracts of those lands have been taken by settlers but abandoned by them as worthless. We have four whole townships of this kind of land without a settler in them. I think that the loss of our pine timber has more than offset our improvements since the year 1876. There is some good land for agricultural purposes in our county which is mostly unimproved.

### ISABELLA COUNTY.

S. CRAFT:—We are a county of sixteen townships, nine of which are very new. We had about 26,000 acres of pine timber five years ago, which have been largely cut over, 639,600,000 having been taken out of the county to Saginaw markets for manufacturing. We have manufactured in the county simply what we have used for building purposes, and hardly as much as we have needed. Our buildings are largely of logs, unhewn, therefore we are in a very

[1] Table No 99.

crude state of civilization. We are compassed about with an Indian reservation, embracing an area of 9,000 acres of untaxable land, according to the best information that I could obtain. We have about 3,200 acres of swamps and lakes that are valueless. Some portions of the county, the townships of Coe, Lincoln, Fremont, Union, Chippewa, and Isabella, are improving, perhaps, about the same as the tier of counties in the same latitute. We have endeavored to assess our county at its true cash value. Our lands average, as assessed, $9.29, including the stump lands, which are situated largely in the west half of the county, consequently that part is not developing as rapidly as the east half. But we do not claim that these stump lands are valueless. They sell for a price, but mostly on time. The west half of the county labors under the disadvantage of not having very well developed highways. Our schools are in rather a crude state; most of the school buildings are built of logs, especially in the west half of the county. In the east half we have some very good school buildings. In our equalization in June all these things were taken into consideration. I see that in the sister counties on the west they run down to less than $7 an acre on their lands, with more railroads—we have but one. We have a station on the Flint and Pere Marquette road at the extreme corner of the county, but it is not accessible for any of our agricultural community. In getting out the timber men were brought in from other counties; they imported all of their supplies, and it has been no great source of revenue to the county, but leaves the land depreciated in value. All we ask is simply justice at the hands of this board, and that we feel satisfied we shall get.

### JACKSON COUNTY.

JOSEPH M. GRISWOLD:—In reference to the assessment of our county, the state of facts is this. The city of Jackson some years ago entered largely into railroad interests, and bonded itself largely for the construction of those roads; consequently, the influence of the city has always been, and will be until their city debt is paid, against arriving at a fair cash value of the county. That is the influence that has prevented that. The townships largely make their assessments upon a cash valuation. The county is full of enterprising men, who have done their share to develop the interests of the State. We are all proud of the county of Jackson, and yet there are some serious drawbacks which ought, perhaps, to receive a little attention. First we have a larger proportion of swamp and marshy lands to our area than adjoining counties from the fact that the head waters of the Kalamazoo, of the Grand, of the river Raisin, and a portion of the waters of the Huron, all arise in the county of Jackson. We are at the highest point of the State, and the observation of all intelligent men teaches us that marshes come out of springs, and they spread over large areas of territory. To prove that this is the fact I will call your attention to the action of the last Legislature. It appropriated twelve sections of land to continue an improvement that has been going on for twenty years,—to drain land around Portage Lake, in our county. Further: these large strips of water and marshy land, in the settlement of the county, particularly of two of the tier of eastern townships, to accommodate the settlers in their township organizations, forced township divisions different from the surveyed lines of the United States; the entire tier of townships is cut up differently. There are seven townships where there are eight surveyed. So far as the manufacturing interests are concerned, a very large portion is

done at the prison. We have but one city in the county. There are very heavy railroad interests in the county. Of course they occupy large tracts of land, have immense buildings, and immense cost of machinery, and the men they employ add largely to the population of our county, but the property they use is exempt so far as our county taxation is concerned. The prison and the railroads do, perhaps, two-thirds of the manufacturing. The other manufacturing interests are concentrated in the city; the villages do very little. Another fact: The State allows the city of Jackson to make its assessment for county and city purposes in the month of February, when all the manufacturing interests of the prison and of the city are at their lowest ebb; it is right after they take their invoices. That makes quite a serious difference in the point of personal property assessed. This is wrong. Further: The 800 men in the prison have no habitation. If they were not there 800 other men with families would occupy the grounds, the lands, the houses, and contribute to the taxable property of the county, where now it is a total dead loss. The people feel as though the mechanical interests would be advanced if the prison was not there.

*Question*—You do not think the personal tax is high enough?

*Answer*—The personal property ought to be increased at the same ratio with the real estate, and no more.

Our assessments average $13.56 per acre. All lands lying between Jackson and Ingham county are about the same quality. From the best figures I have been able to make, taking the marsh lands and the good lands, from $25 to $30 an acre will cover them.

PATRICK HANKARD:—We are mostly a farming county. While equalized as the fifth county in the State, we think we are far behind that in our agricultural interests. We have 431,000 acres of land, and we were equalized in 1876 at $26,250,000. Ingham county, which I consider fully as good as Jackson, acre for acre, has 342,000 acres of land, and was equalized at only $13,000,000—nearly as many acres, and equalized at half the amount. Calhoun county, with several thousand more acres of land, and, we think, just as good, was equalized at $2,000,000 less. Kalamazoo county, in 1876, was reduced something over $5,000,000 from what it was equalized in 1871, and Jackson county held at the same figures. It is a fact that Jackson county is not improving with the newer counties in proportion to where it stood in 1876. There is but very little improvement made outside of the city. In regard to our swamp lands: The Legislature last winter appropriated twenty sections for the improvement of Grand and Portage rivers. The necessity for this is that the waters of Ingham county, from the townships of Bunker Hill and Stockbridge, flow through our county, and we have some twenty miles of drainage before we can get that water off. Theirs is mostly done by digging ditches, and ours is by rivers and creeks, and it is an immense expense to deepen and straighten those rivers so that the water will run off. We feel that Jackson is equalized too high in proportion to the neighboring counties. Mr. Griswold has told you why Jackson county held her assessment down, simply on account of the city of Jackson; but that does not enter at all into the consideration of this board.

### KALAMAZOO COUNTY.

L. W. LOVELL:—Previous to last year our county was assessed at about two-fifths or one-half of its value. A year ago the Board of Supervisors agreed to assess it at its cash value. A board of equalization of five members

was appointed, with instructions to pass a day in each township. At Kalamazoo they spent two days. The committee, therefore, spent seventeen days in examining the county, and the result of their report was a trifle less than $18,000,000. This year our equalization on the same basis is a little over $19,000,000,—two or three hundred thousand dollars more than it was last year. Kalamazoo county is one of the old counties, and has the reputation of being a good county—I think, deservedly. Like the other counties along the southern tier, it is almost exclusively an agricultural county. I presume most of the board have passed through the county and are familiar with some of the older and better towns. Now, I doubt whether many of you, and perhaps not any, have visited the extreme parts of that county. We have in Kalamazoo county, perhaps, as much of the best class of land as any county; but we have our proportion of poor land. While it is an old county there is a certain part that is comparatively new. There is not a manufacturing establishment in the town of Richland. It has, I think, a little less than 1,100 inhabitants. Still, it being exclusively an agricultural town, is assessed over $1,000,000. The township of Comstock is assessed a little over $1,000,000, and the township of Schoolcraft a little over $1,000,000. The township of Wakeshma, one-half of Climax, and one-half of Brady, are exclusively a timber country; what we call beech and maple—distinguished from oak lands. It is interspersed with wet land—elm, black ash, etc. That country is comparatively new so far as settling is concerned; somewhat rough and stony, and the stumps fill in where it is cleared. Those towns are assessed less than half as much as these older towns. The township of Pavilion, while it is an older town, is largely swamp land. Kalamazoo county has but sixteen townships, and not full, having but 340,000 acres of land. The shortage is in lakes. Gull lake is about three miles long, Indian lake about four miles; Austin's lake, Long lake, all help to account for the shortage. Compared with Calhoun, Jackson and Washtenaw counties, and with the counties of the southern tier on the Southern road, so far as marketing facilities are concerned, there is very little difference. Kalamazoo has 349,000 acres of land; Van Buren has about ten per cent more. Calhoun county has 436,000 acres; and Jackson and Washtenaw each 431,000, being about twenty-five per cent more land. I see by the report that Van Buren county produced sixteen bushels of wheat to the acre a year ago; Kalamazoo, twenty; Calhoun, twenty-one and a half; Jackson, twenty, and Washtenaw twenty-two, showing very little difference; and I think you will find that corn and other productions bear out about the same proportion. In number of horses, Kalamazoo county has 8,900; Calhoun, 9,383; Jackson, 10,148; Washtenaw, 10,329. Cows: Kalamazoo has 7,049; Calhoun, 8,115; Jackson, 8,516; Washtenaw, 9,845. Other cattle in about the same proportion. Sheep: Kalamazoo, 69,000; Calhoun, 87,000; Jackson, 103,000; Washtenaw, 194,000, showing that in agricultural products and in stock they have about the same proportion to area and population. In population, Kalamazoo has a little over 34,000; Calhoun, 38,000, and Washtenaw, 41,000. The average assessment per acre is as follows[1]:

| | |
|---|---|
| Van Buren County | $27 28 |
| Kalamazoo " | 49 97 |
| Calhoun " | 29 92 |
| Jackson " | 13 56 |
| Washtenaw " | 44 40 |

[1] Table No 83.

So far as I can see Kalamazoo is certainly assessed higher than the others. Now, I do not claim that Kalamazoo is assessed high. I am one of the kind that think Michigan is a good State, worth all it is assessed, and more too. But take Jackson county. Its personal property assessed $1,200,000—a city of 17,000 inhabitants; any number of banks, with—I don't know how much capital;—all those stores and stocks of goods. But here there are 10,329 horses. If those horses are worth $50 a piece, it makes almost half. There are 103,000 sheep, which, at $3 a head, would be $310,000. Now, the horses, the cattle and the sheep alone will amount to the whole of that assessment. It shows that it is clear down, so that there is no comparison. I think the gentleman from Jackson is mistaken in one statement he made in regard to the manufacturing interests. The manufacturing interests of Jackson, of course, are somewhat extensive. He spoke of the prison; that the buildings, machinery, etc., was owned by the State. The buildings are owned by the State. The machinery of all those manufacturing companies is their own. Of course it is not a great deal. We simply want what is just and fair, and nothing more; and if other counties are assessed at full value we have no disposition to be equalized any other way.

### KALKASKA COUNTY.

GEO. D. HIGLEY:—I wish to make a statement showing the condition of Kalkaska county as regards the valuation. Last year it was $2,480,000. Five years ago, having Crawford county attached, it was $2,500,000. While we have a new county, being organized a little over ten years—in fact, twelve years ago a wilderness—we are steadily gaining in settlers and wealth. At the same time there is a vast amount of wealth flowing out of the county in the form of saw-logs, etc. I do not think the value of the county is more than it was five years ago. The average valuation is something over seven dollars an acre, which is, to my mind, high enough, taking into consideration the fact that about one-third of the county is practically useless for agricultural purposes. It is composed of stump lands and pine plains.

### KENT COUNTY.

R. B. LOOMIS:—Neither my colleague nor myself are here for the purpose of disparaging or belittling Kent county. We have a noble county, of which we feel justly proud; a county which is increasing in population as other counties; a county which we hope is increasing in wealth, perhaps not so rapidly as some, possibly more rapidly than others. The people of Kent county were dissatisfied with the apportionment of 1876 for the reason that while from the most authoritative statistics we were able to get Kent county was second in agricultural productions and the value of farming lands, and while from the same statistics we were poor in manufactures, yet the State Board placed us as second in valuation. At this time we do not stand second in point of agriculture, but ninth. In point of manufactures I have no doubt but that we have outstripped some of our neighbors, and that instead of being fourth, as five years ago, we may be third or second. I do not expect that because Kent county is ninth in the list of agricultural products she will be placed ninth in valuation, or that she will be placed second in valuation because she is second in manufactures, but that this board will strike a happy medium. With refer ence to the agricultural status of our county, we have sixteen good townships The eight townships on the two northern tiers are largely made up of stum lands, and are really worth very little. Of course the other supervisors in th

county would not assent to this unless they honestly felt that the valuation was being reduced. I want to say a word or two in regard to our manufactures, and show you the difference, which, of course, is obvious to you, as between agriculture and manufactures. The farmer has a market for his products at his door, but not so in regard to manufacturers. The manufacturer first sends out his men, if possible to create a demand for his manufactures; and by advertising, and by other means of communication having created a demand for them, he endeavors to supply the demand. By thrift and enterprise, and push and energy, the city of Grand Rapids, as a manufacturing center, has come to be what it is to-day. We honestly feel proud of it, but we do not think that on account of our success in that respect this board will hold us at the large estimate of Grand Rapids manufacturers, for the reason that the profit to be derived from their products is very largely in the future.

SAMUEL TOBEY:—Kent county as an agricultural county does not stand as a first-class county so far as I am acquainted. The south part of the county is good, fair, agricultural land. The north part is pine stump land. Very large quantities of that land are returned, and are sold for taxes, and, as I understand it, there are large quantities that will not sell for enough to pay the taxes. So far as the products are concerned we stand about ninth.

### LAKE COUNTY.

GEO. N. JONES:—The county of Lake has of:

| | Acres. |
|---|---|
| Hardwood timbered land | 41,309 |
| Improved land | 13,770 |
| Swamp and stump land | 86,063 |
| Plains | 99,832 |
| Pine land of all grades | 103,275 |
| | 344,249 |

The table shows very nearly the exact amount of the several varieties of land. Pine timber is mostly scattering, and will average about 7,000 feet to the acre; was assessed at an average of $7. Swamp, stump, and plains lands are worthless and unsalable, and assessed at $1.25 per acre. The Board of Supervisors believed the equalized valuation to be very near cash value, and if the State is equalized at less than cash value we ask to be reduced in proportion.

### LAPEER COUNTY.

P. STIVER:—In looking at the assessment of other counties, I think we have assessed our county too high in proportion. In regard to the quality of the soil we have a pretty good county. A large portion of our county is pine stumps and swamp land, and yet I see from the report the supervisors have assessed nearly double what the county was equalized at five years ago. I think the supervisors have been excited some in increasing the assessment from one-fourth value to the full cash value, and have got considerably astray.

### LENAWEE COUNTY.

CHAS. H. DEWEY:—I have nothing disparaging to say of Lenawee county. As is well known, it is one of the oldest counties in the State. It is an agricultural county, and a good one. Its general products are corn, wheat, oats,

wool and cheese. The manufacturing interest is not very large. It has the advantage of lying near the common markets. However, it lies near some of the highest points in Michigan—the elevated points. What is termed "Michigan heights" is in Lenawee county, from which the observer can discover the rise of Grand river and the river Raisin. These tributaries form less or more of waste land as they find their way through the county, particularly the river Raisin. It creates in some instances what is generally termed the "Cottonwood Swamp," lying chiefly in the south part of the county. This portion of the county is not yet reduced to a state of cultivation; in other words, it has not been recovered from its native position of a water deposit; and is chiefly submerged. Hence, those parts of the county are not as valuable as many other parts are; but that they will be in the future, we have the greatest hopes. We have a district of country situated in the central part of the county that we claim has no superior in Michigan as a farming district, consisting of the towns of Tecumseh, Raisin, Franklin, Clinton and Madison. There are twenty townships of land in the county. Two of those townships have been divided, making twenty-two divisions, to wit, Blissfield and Tecumseh, creating Deerfield and Clinton. The Board of Supervisors in 1880 for the first time undertook to create an assessment equal to the valuation of the county. The expression of the Board given me to present here is this: That, in their opinion, no part or section of the county has escaped being taxed, both for real and personal assessment, to the full extent of the value of its property. In my own judgment I think that is correct. The quality of the soil is universally good with the exception of these localities that I have already spoken of. In addition to these morasses, or marshes, or low lands—called the cottonwood swamp—there is a considerable amount of water in the northern part of the county that was surveyed out at the time the original survey was made. Many of the lakes of Lenawee county have been meandered in the original survey. Devil's lake, Vineyard lake, Jew's lake, Posey lake, and some others are all meandered. There are numerous small lakes into which project parts of sections, and they are considered as a portion of the farms to which they lie adjacent; and the whole amount is taken into consideration in the aggregate acreage that is reported here; but a consideration is had by the assessor in taking the assessment in regard to the amount that shall be assessed. Still the compilation of acres remains the same. I have made a careful compilation of the amount of water that covers the surface of the northern part of the county, lying in Woodstock, Rollin, Hudson, Dover, Cambridge, Franklin and Tecumseh. The aggregate amounts to 9,905 acres of water that is assessed. There is also in the townships of Ridgeway, Deerfield, Blissfield, Ogden and Riga a large proportion of this cottonwood swamp I have mentioned; in the five townships there are 25,230 acres of it. A small portion of this is partially reclaimed; in time we expect it all will be. It has gone into the assessment to fill up the number of acres represented in the county. To be consistent in regard to these things, I ask in behalf of our Board of Supervisors that this Board take into consideration the amount of water, and of morass and waste land. We have given you in personal property $4,666,428. In 1876 the county of Bay was equalized at $7,000,000. We had $4,666,428 this year independent of all real estate, which shows a disposition on the part of the Board to be liberal in making an assessment which should cover all kinds of property. The aggregate of real and personal property as equalized by the Board of Supervisors this year, was $27,045,964. That is but $45,964 higher than the county was equalized by the State Board in 1876. In

regard to that equalization I consider it, in comparison with many other counties, quite too high. While Jackson, Bay, and other prominent counties are showing upon an equalization that they are far below the county I represent, I wish to call your attention as to whether, in your judgment, it is just or not?—not asking that it be reduced a shilling below what it should be in comparison with others.

QUESTION. Did I understand you to state that the rivers Grand and Raisin, had their rise in Lenawee county?

ANSWER. One of the sources of Grand river and the river Raisin rise within sight of Michigan Heights, which is in Lenawee county. While my friend Griswold says that Grand river rises in Jackson county, I can take him and follow it into Lenawee county; but it is very small.

### LIVINGSTON COUNTY.

GILES LEE:—In regard to the source of revenue of Livingston county, we have no manufacturing. Our location is well known. We have a railroad running diagonally through the county. Seven of our sixteen towns go to the same market they did twenty-five years ago. I have a statement making comparison with twelve different counties in different parts of the State, which I wish to submit for consideration. It is hard for us to reconcile the equalization of Shiawassee county in 1876 at $9,250,000, with 27,000 inhabitants, with her 863,000 bushels of wheat raised, and with her two representatives in the Legislature, in comparison with Livingston with 22,000, with her one representative, and with her 835,000 bushels of wheat; furthermore, in regard to Clinton county, as we have made the comparison, with her 28,000 inhabitants, with her two representatives, and three railways, and her 1,500,000 bushels of wheat, and equalized at $9,500,000. We do not come here depreciating our county or asking for any favors: we ask for our rights. We have been raised every year, and we think it has become rather common. Five years ago we were not represented here, and they charged $2,500,000. We trust you will make this matter right.

### MACOMB COUNTY.

THOS. DAWSON:—The county of Macomb, which I represent, is a small county containing 296,000 acres of land, less than 13 whole townships of territory, and as the whole county is now assessed, the valuation of the real estate in each township averages abont $1,000,000, which is an average value of $42 per acre, exclusive of the city of Mount Clemens, for all lands, good and bad, and the best improved farms in three-fourths of the county are bought and sold on long time payments at from $40 to $45 per acre, and we have a large amount of poor and unimproved lands and farms, with poor buildings, which make up farms of much less value. Our county is strictly an agricultural county. Our manufacturing interests are confined to the supply and repair of agricultural implements, and to agricultural products only. At a special meeting of the Board of Supervisors called two years ago to consider the question of assessing according to the letter of the law, it was decided to conform strictly to the statute which requires that property be assessed at the price at which it is usually bought and sold, and I think in our zeal to do so we went beyond that price, and have not fully corrected our error yet. We have assessed real estate at its full selling value without any reservation whatever, and personal property at its full cash value. I regard the common selling and buying price

of real estate as ten or fifteen per cent above the true cash value; but we have made no allowance in the county of Macomb for the usual manner of real estate purchases, which are generally made in payments of about one-third or one-fourth cash down, and the balance in installments or credit payments running over a period of from five to ten years' time, and sales are made after the lands have been held in market many years. These conditions of purchase properly demand a considerable discount on the common selling price to entitle the purchase value to be called a real cash value. And should your honorable board take these considerations into account in arriving at a cash value, Macomb county would claim such a percentage of reduction as you might think the foregoing conditions entitled to demand. With regard to the comparative assessments of other counties of the State, the statements of their representatives, together with such other information as comes within your knowledge, will enable you to judge more correctly than I am capable of advising.

MANISTEE COUNTY.

SEYMOUR CALKINS:—As regards the equalization in Manistee county compared with our sister counties north, we compare very favorably with such counties as Grand Traverse, Wexford, Benzie, and Mason in relation to climate, productions, etc. In 1871 the State Board equalized us at $2,460,000. We were not very well satisfied with those figures; they were too high at that time. In 1876 we obtained a reduction on the ground that we were purely a lumbering county, that the cutting and exporting of our valuable forest more than balanced the increase in other respects. What was true then is true to-day. During the last five years we have drawn heavily upon our resources. The principal resources of Manistee county lie in the mill products and in her facilities for manufacturing and exporting lumber. We import largely our beef, our pork, breadstuffs, and hay. We do not raise enough to supply ourselves as yet, as we are a new county. It is only twelve or fourteen years since the first settlers came there to undertake agriculture; the manufacture of lumber has been carried on somewhat longer. In 1876 the assessed value as equalized by the Board of Supervisors was $1,458,392.19. We have increased that valuation by nearly a quarter of a million, which we claim to be about the true increase. We aim to assess our property as the law directs. We were very well satisfied with our last equalization by the State, which was $2,000,000, and we do not expect to be raised on those figures, at least higher than the rest. We have 312,024 acres of land to assess, which averages $2.15 per acre. Now, that is a very low average compared with some of the averages of the south part of the State, but our lands are divided in about the following way: We have about 30,000 acres of pine left standing, which we assess at an average of $10 an acre. That we consider a very high figure. We have 175,000 acres of stump lands, which are assessed at twenty-five to fifty cents an acre—all they will bear. Were those lands assessed any higher the State would have to carry them. It leaves the balance, 107,000 acres, I think, of the so-called agricultural lands, assessed at $4.10 an acre. Now, when we consider the location, the climate, and situation of these lands, we consider that pretty high. Not more than one-quarter of them are improved; the balance belongs to speculators, swamp land and wild land. What improvements are on these lands are new. The county is not old enough to have many improvements in the agricultural line. Our fences are poor; in fact we have no fences. The buildings are poor. These lands lie in the north

part of the county, on an average twenty miles from the city of Manistee. We have to travel over these stump lands to transport our produce to market, which costs us twenty per cent. In the south part of the county lie the stubble or stump lands, in which the city is situated. Manistee city is a thriving city. We hope some day, when the pine is all stripped off, to have something to to take its place; we have discovered salt. Let us alone until we produce something else. When we have any other industry to take the place of lumber we are willing to be taxed for it. We have no railroad in Manistee as yet. In 1874 our population was 8,471. We have increased that a little over 4,000, but it is not an increase of capitalists. It is largely due to laborers that work in and around the mills. The agricultural portion of the population was there ten years ago, so that it does not show an increase of wealth according to population.

MARQUETTE COUNTY.

M. H. MAYNARD:—I represent the largest county in the State, and in some respects the richest. We do not pretend to be poor. We think we are doing very well, and we hope to do better. But the bulk of our wealth cuts no figure in the valuation which is brought before you. Our Legislature has imposed upon the mining companies of the Upper Peninsula specific taxes, which are in lieu of all State taxes; consequently the valuations of mining property are stricken out of the valuations which we report to this Board. We succeed and prosper as the mining companies prosper. We depend upon them for support. There is nothing else there. There are not a thousand acres of land in Marquette county under cultivation; not two thousand that produce anything of any value. There is but one town in the county that is not dependent. In that township there is some agricultural land which it is hoped may be made profitable; but the climate is inhospitable. It costs a great deal to clear land. There are 1,500,000 acres of land in the county—more than twice the acreage of any other county. It has about three and three-fourths times the acreage of Houghton county, yet our population is only 25,393, and our property is valued four times the value of the property of Houghton county. We felt in 1871 that the equalization was too high, and we have felt it a great deal more since. In 1876 we cherished the hope that the light was just ahead of us, and we consented without great protest that our valuation should be fixed at $4,000,000; but the result has been that the total aggregate valuation of the property of that county, as equalized by the Board of Supervisors since then, has been less than $4,000,000. The fact is there is no price for wild lands. I can buy land for sixty dollars a foot which, several years ago, would have been worth $150 a foot. In 1881 we have fallen behind in our total valuation from 1879, and I will explain the reason: A large number of new mines have been opened, and that property must at once be withdrawn from our valuation. Our supervisors are constantly called upon to meet that sort of thing; and it sometimes become an honest question whether they are not trying to dodge their tax. If the State will allow us to levy tax upon that ground we would not object to having our valuation raised fifty per cent at once. There is no fixed value of property at all in Marquette county; it depends altogether upon the prosperity of the mining business. I say we have paid too much State tax in the past. If it were not for the mining interests the people would not stay there. Property would be worth nothing. Ontonagon is an example. It was a flourishing town in 1855

to 1859. A large hotel was built there, costing $60,000; to-day it is a mere habitation for rats. Ontonagon is flat, and Marquette may be the same. We hope not; but if the iron business is prospered as it has been in 1879 and 1880 we may hope for exceedingly good times; and if such a crash, such depreciation shall occur again the people of Marquette county will be discouraged. We have two land grant railroads. The land of the Chicago & Northwestern railroad appears on our assessment roll.

QUESTION. Do they pay taxes?

ANSWER. They pay them; but they inform us that we must value their lands at a fair price or they will not pay them. Some of their lands are valued at from five to twenty-five cents an acre; and if any man knows the lands he would not take them as a present; they are absolutely worthless. I asked the commissioner of the land department of that road to furnish me with their prices. I have his letter here, wherein he states that they have lands for sale as follows:

| | | | | | | |
|---|---|---|---|---|---|---|
| 10,476 | acres | at | $ 05 | per | acre. |
| 13,113 | " | " | 10 | " | " |
| 7,318 | " | " | 25 | " | " |
| 22,987 | " | " | 50 | " | " |
| 8,740 | " | " | 1 00 | " | " |
| 1,557 | " | " | 1 25 | " | " |
| 9,227 | " | " | 1 50 | " | " |
| 9,923 | " | " | 2 00 | " | " |

These are the lands of the Chicago & Northwestern Railroad Company in Marquette county. I have a letter from the exploring agent of the other railroad, the Marquette, Houghton & Ontonagon Railroad Company. He says they have about one hundred and twenty-four sections, or 79,360 acres of what he calls his first division, composed of wind-falls, barrens and burnt lands, not worth more than ten cents an acre. They have what they call culled land out of which the better portions have been sold. Out of this lot they sold, during the past year, 18,600 acres of selected lands, all tributary to the river; the remainder, over a hundred sections, is worth from one to fifteen dollars—detached pieces of pine being worth some fifteen dollars an acre. There are 228,428 acres of land scattered through that country, reasonably accessible to the railroad, at least 150,000 acres of which is for sale at a dollar an acre and less. We have nothing that is of any value except as the mineral region gives it value. Within the last year pig iron has been worth from $18 to $60. That sort of fluctuation affects everything in the county. We export nothing except our iron ore, and from 4,000,000 to 6,000,000 of lumber. We never have exported that amount of lumber; but we shall this year, the Chicago firm having gone in with a mill. Aside from that saw-mill there is an establishment for the manufacture of machinery. There is not another manufacturing establishment in the county except the powder mill. The indebtedness of the city of Marquette is $150,000. We have two banks. The First National bank was organized early in the days of the national banking law, with a capital of $50,000. It was a great success, and increased its capital $400,000; in 1874, it called in three-fourths of its capital and sunk it, paying back fifty per cent. The other is a private bank. The increase of the population of the county from 1874 to 1880 was only 4,000. In the two years after the panic the Northwestern Mutual Life Insurance Company loaned $150,000 in the city

of Marquette, and every mortgage but two was foreclosed before the principal was due for non-payment of interest, and the property was sold for from twenty-five to seventy-five per cent of its value. To-day, with three or four exceptions, every business block in the city is either under mortgage for half what it is worth, or has been sold and is held by somebody who has got it on the mortgage. We hope to ship 3,000,000 tons of ore this year.

### MASON COUNTY.

CHAS. E. STORRS:—I am not here to disparage this county, because it is a pretty good county. We have 18,114 acres of what we call improved lands, with the timber cut off, so that we can get in our crops by going around the stumps a good deal. We have of unimproved farming lands, 175,000 acres. Perhaps one-half of that is very good land; about as good as around Lansing. The other is heavy timbered land. We have some good pine and we have some very poor. We have in the county, though I think not all assessed, about 30,000 acres of swamp land, which is quite valuable for cedar timber. A large proportion of it when the timber is taken off, will be for a great many years of no value. We have 90,000 acres of stripped pine land that is assessed from fifty cents to one dollar an acre. I have the valuation here as it was changed by the difference of assessment. In 1879 the total assessed, and I think equalized, valuation was $1,232,623.42. In 1880 it was $3,042,810.79, and it does not vary a great deal from that this year, making something more than two and a half times the amount it was two years ago. The citizens of our county claimed five years ago that there was a little injustice between them and Manistee county. We were equalized the same as they at $2,000,000.00. This year their aggregate valuation as equalized by their board of supervisors is $1,691,250.00. The total of Mason county is $3,165,244.80, almost double. We acknowledge that we have, perhaps, outside of the cities of Manistee and Ludington, the best of them. We have about the same amount, perhaps, of pine timber, but we claim we have better farming land, and land that in the future will be worth more; but we do claim that the mill property and the property in the city of Manistee is worth nearly or as much as the whole of the county of Mason. I have here a statement of the assessed valuation of mills in this county, and that is the total of our manfacturing interest. We have invested in Mason county in mills $325,000.00. We have around Pere Marquette lake, seven saw-mills and three shingle mills. Outside of that we have one saw-mill and shingle mill, and at Ludington a saw-mill; one assessed at $17,000.00, one at $10,000.00, and one at $5,000.00. Around Manistee lake I believe there are about four times that number of mills and of equal or greater capacity than at Ludington. The assessed valuation of personal property in Manistee county is $466,833.00; in Mason county $948,380.00, making it a little more than double in Mason county what it is in Manistee. Of course the county is injured some by stripped pine lands. Now we ask only justice, and we really expect that without the asking.

### MENOMINEE COUNTY.

JOSEPH FLESHIEM:—Menominee county is not an agricultural county, but it is valuable mainly for its pine and mineral. There are a few farmers who have taken up homesteads upon government lands, but not having any means to speak of it is about all they can do to raise products enough for their own support, and as only the improvements upon such farms can be assessed it

amounts to very little in the aggregate as far as the agricultural lands of the county are concerned. We assess our real estate at nearly its full value and our personal property at about fifty per cent. We have a great many stump or cut lands which are assessed at fifty cents per acre, being all they are worth. If we assessed them any higher the owners would allow them to be sold for delinquent taxes and they would only be a burden on the county and State. I have here a sworn statement from the Chicago & Northwestern railway company whose land grants from the State and government lie mainly in our county, giving the price at which the lands are held and offered for sale by said company, and some of the tracts are offered as low as ten cents per acre. Our mining interests pay a specific tax upon their products, which exempts them from taxation for State purposes. I desire to call the attention of the board to an error made by the board of supervisors in equalizing the taxes of the county. The total value of the real and personal estate as appears from the record is $1,757,862.25. In this amount is included the producing iron mines of the county, the value of which is about $150,000, and which should be deducted from said valuation to prevent them from being double assessed. Before closing I desire to return my thanks to the members of this board for their kindness in suspending the rules for receiving reports from counties in alphabetical order and allowing me to make my report previous to the time that it should be made.

### MONROE COUNTY.

HIRAM WAKELEE:—Monroe is one of the oldest counties in the State. She has arrived at the culminating point and ceases to grow. Other counties are outstripping her that are far younger. Monroe county is mostly an agricultural county; her lands are good. The supervisors during the past two years have tried to assess at what they deemed to be the true cash value, and that varied materially from the equalization this board put upon us five years ago. We have on our eastern borders some 30,000 acres of wet, marshy land. They run the water down and empty it out on the eastern side in the bay. Lenawee runs her water across Monroe. Monroe being the extreme southeastern county her outlet and place of market is mostly at Toledo. We have several railroads. Five years ago the State board equalized us at $9,500,000; now the supervisors say it is worth $15,000,000.00. Perhaps that is right. We have not a great amount of manufacturing. In the city of Monroe we have three flouring mills, one saw-mill, and one small iron foundry. The lands in Monroe county run from $17.02 up, the highest priced township being Monroe,—$51.17. Adjacent to and adjoining the city of Monroe on the south the lands average $31.81 per acre. There are fifteen townships. On the east side they are very much cut up by the bay, and as I said before, covered with water. Lenawee county makes a good showing. What shall I say of Jackson county? Your Jackson county is a garden of Eden compared with some portions of Lenawee and Monroe counties. In passing through it coming to this city I saw splendid farming country, and yet it was only $13.56 an acre. If Jackson county is only worth $13.56 an acre, give Monroe a chance.

### MONTCALM COUNTY.

W. DIVINE:—Montcalm county does not come here to complain. Five years ago our county was equalized at $4,500,000. We are now raised to

$8,500,000.00, and we think we have raised it about what it is worth, still a great many in the county differ with the board and say it is too high, but we thought we would rather have it a little too high than a little too low. Montcalm county is composed of twenty townships. I have a statement showing what the lands consist of. I will state that what I call good improved lands are those that are well improved, with good buildings, well fenced, and under a good state of cultivation. Those partially improved are lands that have got stumps, lakes, and poor buildings, log houses, log barns, etc. That is the distinction I make between good and partially improved.

MONTMORENCY COUNTY.

W. C. CAIN:—I have very little to say about our county, only that it is a new county. In 1876 Alpena county, as it was then, including Montmorency county, was equalized at $1,500,000.00; now we are assessed at upwards of $1,202,000.00, and from that I think we are assessed too high. We have a great amount of assessed lands. Since 1876 there has been a large amount of pine taken from our county that is not assessable, as it is manufactured in Alpena county. I have no doubt but we will get a just equalization, and trust that you will consider the state we are in. The improvements since 1876 have not at all been in comparison with the amount of pine timber taken from our county since that time. Our personal assessment is something less than $11,000.00, so that we have not much in the way of personal improvements since that time. I think we ought, in justice, to have the equalized amount less than our assessment considerably.

QUESTION. What proportion of your county is farming lands?

ANSWER. I should judge less than half. We have considerable plains. There are very few settlers as yet. I think about seven years ago the first settlers went into the county, and, it being twenty-five miles back from the lake shore and no communication except very poor wagon roads, people do not come in very fast.

MUSKEGON COUNTY.

H. H. HOLT:—Muskegon is one of the pine counties. Although we have a prosperous and thriving city, of which we are rather proud, still there are reasons why the aggregate valuation should not be increased. Almost every section in the county was originally pine land to a certain extent. The townships of Ravenna, Casnovia, and Holton, on the east side, are good farming townships, or will be when they are better developed. Leaving out those three, with some small portions of some other townships, and the county is not an agricultural county by any means. There are tracts of clay land that are more or less valuable for agricultural purposes. All through different parts of the county, particularly along the streams, there is a great deal of land that is entirely worthless, and will not sell for as much as the original purchase price of the government. A great deal of this land had been picked up five years ago by homesteaders, with the idea of making farms of it. At that time a great many of them put fictitious values upon their lands, but they had not means and did not improve their lands, and the consequence is that a large proportion of them have abandoned their homesteads and gone into the mills or gone away, and at a great many places you will see the log houses abandoned and standing vacant. A great many of these lands have been returned for taxes. The amount that our county owes the State is about $70,000.00, and it is upon these

lands to a large extent that this tax is due. A great many of these descriptions have been running from five to eight years, and the lands would not sell for enough to pay the taxes, even if a good title could be given. Still further I will show you that we cannot be regarded as an agricultural county. In 1879 the number of acres in wheat in Muskegon county was something over 4,000. In Oceana county on the north there were 8,000. The county of Newaygo on the northeast had 9,000. The county of Mason had nearly 3,000, while Livingston had 53,000; Lenawee, 52,000; Lapeer, 40,000; Kent, 53,000; Jackson, 68,000; and Ionia, 65,000 acres at the same time, so that our 4,000 acres figures as a very small amount in the line of wheat production. The same is true in regard to other crops. We raised at the same time about 4,000 tons of hay. Our county has acquired some reputation as a fruit producing county. We expect it will become such at least. It is not at present a fruit producing locality. It must be remembered that strawberries, grapes, and the small fruits cannot be cultiuated far from the lake. Five or six miles away from the lake shore fruits cannot be cultivated successfully, so that a very small portion of the lands of Muskegon can be regarded as fruit lands. There being a light soil, and the fact that they cannot be used for fruit growing, the lands must for a long time remain almost entirely worthless. The city of Muskegon is increasing rapidly in population; but this population consists largely of foreigners. They are poor people. They add largely to the population; but they bring no wealth, and do not add to the taxation. Half of the taxable property, or half of the taxation, is in the city of Muskegon, and a quarter is in the villages of Whitehall and Montague, leaving only about a quarter of the valuation for the balance of the county. It has been intimated that we have a large amount of lumber. That is true. But this timber is not cut from Muskegon county. It is not a pine producing county at the present time. This lumber is cut far up the river, from Higgins and Houghton lakes, above Big Rapids. It is cut in the winter and does not reach Muskegon in time for taxation. It is not used there very much until June, and is not taxed to a large extent. A large proportion belongs to outside parties, and it not being in the city of Muskegon at the time the assessment is made it cannot be taxed as a part of the taxable property. We only have about a million of personal property taxed for that reason. Our lumber is shipped almost as fast as it is sawed. The settlers have very little personal property. The pine lumber is about all we have for taxation, and this escaping as it does, the amount of our personal tax is smaller than it seems to be.

QUESTION. Are not the logs taxed on the way down the river?

ANSWER. Some of them are.

Another thing: A man commencing on a new farm has a great deal of uphill work. It is slow work, particularly on pine land where the soil is light, to make improvements, and it is much more difficult for him to pay tax than it is for a new man on a better farm in the southern part of the State. I think it is better that the old counties should be taxed too high, if there is any mistake, than the new ones.

QUESTION. What are you doing with these foreigners that are coming in there?

ANSWER. They generally remain in the city. A great many of them are renting houses; others are buying part of a lot and putting up houses. Of course they are becoming good citizens, and we are glad to have them come. What I meant to say is they are not men that generally add much to taxation

## NEWAYGO COUNTY.

[Written Statement.]

S. WEBSTER:—Mr. President, I have been duly authorized to appear before this honorable board of State equalization for the purpose of representing to you the taxable property of Newaygo county. This I understand to be my mission. At a suitable time I desire to make some statements to this honorable board in relation to the shrinkage of real estate in said county for the last five years, owing to the large amount of pine that has been cut and marketed. It is a fact that when this amount is reduced to feet it involves figures of high enumeration. I presume the members of this board have substantial knowledge in relation to this matter, still I wish to tell you what I know about it. Some time last spring I saw a statement in one of the State papers estimating the cut for the last three years in Newaygo county at 450,000,000; 150,000,000 the preceding two years I think would be an average, on account of a larger amount being put into the Muskegon river, making a total for the last five years of 750,000,000. Now I wish to submit a statement to this honorable board founded on my own observation and the best information I have been able to obtain. I have ascertained from the clerk's books of the White lake booming company, who have had the running of the logs for the last five years on White river, that the average cut was 75,000,000 annually, making a total of 375,000,000 that went down White river from Newaygo county. I have also learned from scale books and resident lumbermen of the Pere Marquette river lumbering region the average cut for the last five years was about 40,000,000 annually that went down said river from Newaygo county; total, 200,000,000. Now we have the district of the Muskegon river. It is true the majority of the pine is gone, but during the last five years heavy firms have been operating with improved roads—such, firms as Ryerson & Hill, J. D. Squier, and others. In my judgment, based on outside evidence and observation, 225,000,000 for the last five years would be a low estimate, making a total of 800,000,000. Now what was this pine worth when standing? In my judgment it was worth two dollars stumpage. First estimate, 750,000,000, would amount to $1,500,000. According to my estimate there would be $100,000 to be added to the first, making $1,600,000. It is within the last five years that improved roards have been constructed at great expense, and used successfully, together with good times. These are substantial reasons why the last five years' crop exceeds the preceding five years. According to these figures Newaygo county has been a grand lumbering county. It is my opinion it has had but few rivals in the quality and quantity of its pine timber. Now we have come to said county as it appears to-day, with its farming lands, its stump lands, and not more than one-quarter of its former wealth in pine timber. In relation to farming lands I would say the townships of Ensley, Ashland, Sheridan, Dayton, Sherman, Garfield, and Denver, are tolerably well improved and are comparatively good, all of which have had more or less pine, some a large amount that grew in belts and clumps and a small amount still standing. These are the best towns in the county but do not compare favorably with towns in the southern portion of the State. In relation to the other seventeen, they are very poor farming lands. The farming land lying in detached bodies has some good farms; average, improvements third rate and very limited. These lands do not invite farming capital and to sum it up we cannot reasonably expect very much from them for the present in products, from the fact that two-thirds of them were originally bought for the pine timber, not for

the soil. The amount of pine taken from these lands, as we have shown, is an indication of their value for farming purposes. It is true Newaygo county has a large amount of stump or cheap lands ranging from fifty cents to $2.50 per acre. The same lands were worth from $5 to $20 two or three years ago. The result is the former value in pine that helped bear the burden of taxation is now transferred to the resident tax-payers. They have realized this for the last few years in the form of high taxes. The rate of increase in acres improved for the last five years according to the secretary's report of farms and farm products is from 5,000 to 7,000 acres annually in the county. Estimating the improvements at $15 per acre, 5,000 for five years would amount to $375,000 and 7,000 to $525,000. Now deducting this larger amount from the amount of loss we have sustained in pine would show an actual shrinkage of real property in Newaygo county for the last five years of over a million dollars. Now in relation to the matter of taxes I would say that Newaygo county and others of like circumstances have a heavy burden to carry. By way of illustration, three years ago we found our assessed value was dropping off annually. There being quite a stir over the State about low assessments the supervisors passed a resolution requiring each supervisor to add fifty per cent to his roll. The result was a farm worth $2,000 was assessed at $3,000, 80 acres stump land at $80 or $100. The same land being pine the preceding year was worth $5 to $8. Thus you see how the aggregate value is kept up by adding what we have lost in pine to other property, the majority of it resident. The result is high taxes. Our current expenses of township and county increasing it cannot be otherwise. It is not the case with other portions of the State. There being an annual increase in said property lightens the burden of taxation. The supervisors of Newaygo saw this matter from the same standpoint I have tried to represent to this honorable board, not wishing to escape any just taxation nor paying any unjustly. Fully relying on justice at the hands of this honorable board I respectfully submit the above.

### OAKLAND COUNTY.

JOSEPH SMITH:—I am happy and proud to say that I believe I represent one of the best counties in the State. For the last ten years we have been equalized at $24,250,000—about the fourth county in the State. The total assessed valuation in 1881 was a little over $24,000,000. Upon looking the matter over the board of supervisors believed they had assessed the county too high, and they reduced their assessed value to a little over $23,500,000. Oakland is wholly an agricultural county. There is but very little manufacturing going on. In the eastern part of the county, in the village of Rochester, we have two paper mills and a factory, and that is about all. The only city is Pontiac, and about the only manufactory they have is a pump factory. The soil is various; we have good grazing lands and good wheat lands. We are not in debt; but that does not add to our value. Oakland is one of the oldest settled counties in the State. Her farming lands are not worth as much as they were ten years ago. Her buildings are going down, and they are not making new ones. I put all confidence in this Board, and if $23,500,000 is not sufficient we are perfectly willing that the Board should add to Oakland county. All that we ask is our just proportion. Our lands were reported as assessed at $34.93 an acre. I think it would be about $40 an acre when you get at the true figures; there is a great deal of water represented here as land. There are between three and four hundred beautiful lakes in the county, and many of them are returned by the supervisors of the townships without any regard to this;—they are mostly

known as so much land. I think I am safe in saying that I could not sell the lands of Oakland county for $40 per acre. The only city—Pontiac—is not doing anything, lying perfectly dead, and the property depreciating in value. Holly and Oxford, small villages, have made some advancement.

JAMES RUTHERFORD:—I believe that we have a good county. I believe several counties compare favorably with Oakland as to agriculture. I wish to call attention to the number of lakes included in the area of our county. They are numerous and beautiful and add to the scenery, but detract from the amount of land; consequently there should be a little allowance made in view of that. The valuation per acre is about $35; but it was understood at the meeting of the board of supervisors that it was about $40. The valuation of our personal property per capita is $95.30. The total valuation is about fifth. The manufacturing interests are declining: it is almost entirely an agricultural county. There is only one objection, the rolling face of the land makes it uncertain for the winter crops.

OCEANA COUNTY.

N. C. SMITH:—Mr. Chairman and Gentlemen of the State Board of Equalization: In representing Oceana county before your honorable body, I would just call your attention to the facts: First, As you already know that we have sixteen (16) townships, total assessment of 333,316 29-100 acres; thirteen (13) of the above towns contain 121,000 acres of stripped pine land, 56,000 acres of which is held to-day by the State for unpaid taxes according to the treasurer's report of our county. While we were satisfied with the State equalization of 1876, we feel confident that considering the amount of land stripped since then—about one-half of the whole amount stripped—we did at our annual meeting in June make and send to your body a just and reasonable valuation of the taxable property of our county. Feeling confident that you will deal justly, I leave the matter with you, all the statistics being in your hands.

ONTONAGON COUNTY.

T. NESTER:—Ontonagon county is new, comparatively speaking, and undeveloped, but has a large area of very good land and considerable pine. It has also some mineral lands which, it is anticipated, will be valuable. We are increasing in population right along, and hope to soon develop in the way of building railroad lines; there is one under construction at present. The board of supervisors sent into the woods to ascertain the value of our land so as to get at the true cash value. As regards the valuation of personal property in Marquette county; it is about $234,000 now. They have five banks—their delegate told you about two; they have three more. I venture to say that the banking capital of Marquette county will exceed the entire sum they have down here for personal property. As regards the value of their lands: They show $2,137,705. A few weeks ago the Marquette and Ontonagon Mining Company made a sale of $2,500,000 cash. The lands are all situated in Marquette county. That alone exceeds the entire cash valuation nearly $400,000. We are willing to bear our share of the burden, and if you have got to raise any more, and you think it is necessary to put a little more on Ontonagon county, put it on and we will stand it.

OSCODA COUNTY.

C. M. COMINS:—Having been chosen by the board of supervisors to represent the interests of Oscoda county at the present session of the State Board

of Equalization, I will lay before you the following facts: Oscoda county, like other adjoining counties, is comprised mostly of pine lands and plains, which are of but very little value after the pine has been removed, which is being done very rapidly. There is, as near as I can estimate, about one-fourth of the lands in Oscoda county which are very good farming lands. The balance, or about three-fourths of the lands, are (after the pine is removed) nearly worthless, being barren plains. The farming interests of Oscoda county are but slightly developed at present. We have no mills of any kind. The pine is floated away by the Au Sable and Thunder Bay rivers to be manufactured into lumber at points in other counties. There is a large amount of timber removed each year, and also quite a large amount burned and destroyed, which reduces the value of the lands in proportion to the value of the pine removed or destroyed. At the present rate it will only be a few years before the valuable timber will be nearly all removed, and there is no prospect of any other enterprise to replace the wealth removed. I make this statement, not with the expectation of getting anything more for Oscoda county than is just and right, but simply to let this board understand what the prospect is for the next five years.

### OTTAWA COUNTY.

KOMMER SCHADDELEE:—I desire to make a brief statement in regard to the quality of our land. We have in Ottawa county some very good farming lands, but in connection therewith there is a great deal of land which is poor, and some that is valueless. The valuation of the real estate in our county has been reduced $960,000 by the board of supervisors of 1881. There is a two-fold cause for this reduction. First, there is a decrease in the real estate of the city of Grand Haven alone since 1876 of nearly $500,000, and in the city of Holland of $225,000. Another reason is five or six townships have too much of these pine stump lands. These lands in previous years had their value on account of their timber, but being now stripped of that, and being more fit for agricultural purposes, it very naturally decreases in value. The townships of Crockery, Robinson, Spring Lake, Grand Haven, and Allendale, and the northern and western parts of Holland, are reduced in their real estate since 1876 to the amount of $225,000, making a total of those items of nearly $1,000,000. The value of our personal estate has been increased from $681,000 in 1876 to $1,400,000 in 1881.

*Question*—In your estimate of the decrease in the value of the real estate, do you come down to 1881—at this time?

*Answer*—Yes, sir.

*Question*—Was not there an increase in real estate in Grand Haven last year?

*Answer*—I think not.

*Question*—The lumber interest has been prosperous?

*Answer*—Yes, but that is transitory.

### PRESQUE ISLE COUNTY.

ROBERT HORN:—Mr. Chairman, and Gentlemen of the Board—The statement which I am making shall be very brief. All I wish to remark on the subject is this: A good many of the members of this honorable board may be under the impression that Presque Isle county is an entirely pine territory, which it is not. The most of its valuable pine timber is stripped off, which five years ago represented the average valuation at the rate of $5 per acre; the same stripped off lands are now almost worthless, and appear upon

our assessment rolls for the present year from seventy-five cents to one dollar per acre, the bulk of our lands remaining are farming and swamp lands, and valued at the rates from $1.25 to $5 per acre, a good deal of it requiring immediate draining and ditching. The tabular statement of the equalized valuation by the Board of Supervisors at their meeting in June last, now on file with the secretary of this honorable board, shows the true cash value of all the taxable real estate and personal property, to the best of their knowledge. I would therefore respectfully recommend to this honorable board that the same do pass, without adding to or deducting therefrom.

ROSCOMMON COUNTY.

WM. MINNIS:—I have very little to say in regard to Roscommon county. There has been, and is yet, considerable pine in the county, but they are cutting it off very fast. Last year there was cut in the neighborhood of 250,000,000 feet. It is not manufactured in the county, but is floated down the rivers to Saginaw and Muskegon. There is only one manufactory in the county that I know of—St. Helen's mill. There is a vast amount of plains in the county and a great deal of swamp. There are very few schools and one village. The taxpayers of the county have been very well satisfied, so far, with the amount of State taxes they have paid.

SAGINAW COUNTY.

A. ROSS:—I presume the most of you remember the time when it was generally understood that the lands of Saginaw county were entirely worthless for agricultural purposes; that all that portion of the county lying outside of the Saginaw and Shiawassee marshes was one dense pine forest. I do not claim that that idea was correct. I admit that there are some as fine farming lands in Saginaw county as there are in the State; but about twenty years ago a large proportion of the territory of the county was valuable pine lands. Since that time it has been entirely stripped, and nothing is left but the stumps. There is not a foot of territory now in the county that has any valuable timber upon it. Whatever value there is in the realty of Saginaw county is for agricultural purposes. About one-quarter of the area of the county lies within the scope of what is known as the Saginaw and Shiawassee marshes and swamps. A large proportion of the balance was very valuable pine timber, the other part was and is good agricultural lands. I have a table of twelve of the oldest townships, showing what proportion of the lands in the townships—in the rural districts—are agricultural lands. This is outside of those townships that are made fractional by cities. In the township of Taymouth 14 per cent of the land is improved. In the township of Maple Grove 18 per cent is improved. In Thomastown, one of the townships adjoining Saginaw city, there is a little over 24 per cent improved. In St. Charles, 10 per cent improved; in Chesaning, 14¼ per cent; in Albee, five per cent; in Spaulding, one of the townships adjoining East Saginaw, 8 per cent; in Richland, 9 per cent; in Bridgeport there is 28 per cent; in Brant, 16 per cent; in Freemont, 6⅞ per cent; in Kochville there is 38 per cent of improved lands, making an average in those twelve townships of a trifle over 15 per cent. This is a larger proportion than the entire county will bear, from the fact that quite a number of the townships that I have not computed are small and comparatively new. So you see there is but a small proportion of the territory of Saginaw county that is under a state of cultivation. For the last twenty years Saginaw county has been rapidly increasing in value. In 1861 we were equalized at $2,493,660.00; this

year we have an equalized valuation of nearly $20,000,000.00, doubling our valuation over nine times—more than twice the amount of any other county in the State. Five years ago we were equalized at $16,000,000. We have raised the valuation from that time about twenty-five per cent. I do not say that the supervisors have assessed it for more than it is worth. If you place us in the roll at $20,000,000.00 bring the rest of the counties up to a just proportion. I do not believe the State of Michigan is going backwards. I see several of the counties have come in with their equalization less than it was five years ago. It does not look reasonable to me; it seems to me they are trying to delude this board. A few years ago there were some very valuable pine lands in Saginaw county. I know of tracts of pine that, in the years 1870–1–2, were worth all the way from $20.00 to $40.00 an acre. To-day those lands can be bought for from $3.00 to $6.00 an acre. I do not mean to say that some of those pine lands cannot be made good tillable lands, but it requires a large expense to make them so. You may say, while our agricultural interests are not much developed, we have a large lumber manufacturing interest on the Saginaw river. To a certain extent that is true, but the great proportion of the wealth employed in that manufacture is not reached by taxation. The logs are cut in the winter in Midland, Isabella, and all the northern counties on the tributaries of the Saginaw river, and during the spring-time they are being conveyed through the tributaries of that river and are not assessed. The presumption of the law is that a man gives in all his personal property where he resides. A great many of the principal firms on the Saginaw river live outside of the county, and some of them outside of the State. The logs are run down and manufactured during the summer season, and a large proportion is shipped off. A large proportion is piled up on the docks, and when in the spring the assessing officer looks in the yards and asks now much they have got there they tell him it does not belong to them but is sold to other parties and not delivered. We have endeavored to present an equalized assessment that would make a fair showing. If we have got our assessment higher in proportion than almost any other county—of which I am now satisfied—we simply ask that you bring them up in proportion to us or else bring us down in proportion to them.

D. C. Dixon:—One thing: in regard to the valuation of the property that has been ceded to Bay county, it is 20,000 acres of the most valuable land in Saginaw county, and it would be worth somewhere near $400,000.

### SANILAC COUNTY.

Christopher Murphy:—Sanilac county was equalized at $3,050,000 in 1876, at which we did not complain. At that time we had a large amount of valuable timber which has since been cut and carried away. A great deal of those stripped lands have reverted back to the State for taxes, and we now depend upon our farming lands and farming improvements for the value of real estate. We assess what we consider to be a true cash value, and notwithstanding the depreciation of our county by the removal of the timber we have added to the aggregate value in the last five years nearly $1,000,000.00, and we regard our present assessment as honest and fair. We have not come here to ask any reduction; all we ask is what is just and right.

### SHIAWASSEE COUNTY.

A. B. Crane:—I am not sent here to represent to you that Shiawassee county is worthless. I believe it has progressed in improvements of almost

every description, buildings, the clearing of land, and in wealth during the last five years. I believe that is the case with almost every county in the State. I do not believe the State of Michigan as a State, is on the back track, In 1866 Shiawassee county was equalized at about $3,787,000.00. Five years later she was raised to $9,240,000.00,—an unprecedented rise in wealth. During the same years several other counties, principally agricultural counties like my own, some of them manufacturing counties like Saginaw, were increased in nearly the same proportion. By the action of the State board five years later, in 1876, the counties of Bay, Berrien, Cass, Eaton, Genesee, Ionia, Kalamazoo, Montcalm, Muskegon, Ottawa, Saginaw, St. Joseph, Van Buren, and Washtenaw, that were raised in the same proportion to Shiawassee in 1871, were all reduced, while Shiawassee was raised,—slightly to be sure, but raised nevertheless. It may have been argued by those counties at the time that the panic of 1873 and the depreciation of business and falling off in value of farms may have caused their decrease in value. If it were so with those counties it was so with Shiawassee county. If that was the case we claim to have recovered. We claim that we are worth more to-day than we were in 1871 or 1876. The delegate from Clinton county feels dissatisfied because in 1876 Clinton county was equalized $250,000.00 higher than Shiawassee, which he classes as a similar county. Let us look at a few facts with regard to the two counties. First, Clinton county has 185,458 acres of improved land in farms. These figures are taken from the second annual report of the Secretary of State. Shiawassee has 141,328; excess in favor of Clinton county, 44,000 acres. Two full townships more of improved land. Second, Clinton county has 118,104 acres of unimproved land in farms; Shiawassee, 93,810. Clinton has 25,000 acres more than Shiawassee. Third, productions; in 1879 Clinton county produced 1,500,611 bushels of wheat, ranking first in the State in wheat production. Shiawassee in the same year ranked eighteenth, with 863,040 bushels; excess in favor of Clinton county, 637,571 bushels,—almost double. In 1879 Clinton county produced 984,583 bushels of ears of corn, Shiawassee county, 639,247; excess in favor of Clinton county, 345,000 bushels. Clinton county produced 477,028 bushels of oats, Shiawassee, 329,928 bushels; excess in favor of Clinton connty, 147,100 bushels. In clover-seed, hay, and potatoes she exceeds us fifty per cent. Clinton county has also 3,061 more horses than Shiawassee county, 2,174 more milch cows, 1,914 more other cattle, 3,711 more hogs, and 7,483 more sheep. In acres of orchards she nearly doubles us. With this array of facts how can Clinton county claim that they should be equal? I believe that when this equalization is made you will make far more difference than the $250,000.00 that is complained of. We also heard some complaint in regard to Livingston county. The delegate wonders how Shiawassee county with her 863,000 bushels of wheat should stand at $9,250,000.00, and Livingston at $14,000,000.00. It may be that Livingston county is too high or Shiawassee too low. I do not believe that population has anything in particular to do with the equalization of counties. Shiawassee county has two small cities,—Corunna and Owosso. There is a certain class of population quite numerous in cities of that size that pays no tax whatever,—are assessed for nothing,—yet they count in population. These people as a class have large families, and are very poor. Livingston county exceeds us in 56,000 acres of improved land,—two and a half full townships. Two and a half full townships of improved land in the central part of the State, as Livingston county is, is worth a vast amount of money. She also exceeds us in 31,000 acres of unimproved land in farms. The wheat production of Shia-

wassee county in 1879 was 863,000 bushels in round numbers, Livingston being 885,000. I will venture to say that the wheat crop of Shiawassee county for the present year will fall below 400,000 bushels. Livingston county produced the same year 1,224,000 bushels of corn; Shiawassee, 640,000. Livingston has 2,300 more horses, which at $100 per head is quite an item. She has 1,000 more cows, which is also quite an item at $30 per head. She has 1,000 more other cattle, 3,000 more hogs, and finally 52,000 more sheep than Shiawassee,—double her sheep. She also produced 276,000 more pounds of wool than Shiawassee. While we believe Shiawassee county has improved materially in the last five years, and while we think she was raised beyond her just standard in 1871–6, we do not ask you to make any reduction in the present case, but that we be placed just where our wealth and our productions should place us. We expect and hope that the people of our county will be better satisfied with the equalization of 1881 than they were in 1876. It has been said by almost a unit from the counties north that their stump lands were almost valueless; that they were assessed at fifty cents, $1, and in one case twenty-five cents per acre. I live almost at the line between Shiawassee and Saginaw counties. One man I know of has gone over into Saginaw county and bought a pine stump farm, one of the poorest in the State of Michigan, and he paid $5 in cash per acre, and I have seen, since being here in Lansing, wheat produced in the northern counties upon that pine stump land that was sown in the latter part of September, that produced 26 bushels to the acre, and the very finest berry that challenges the very oldest counties in the State to find its equal. That land is not valueless. A gentleman here from one of the northern counties tells me that he has a field of six acres of corn upon pine stump land standing ten feet high.

### ST. CLAIR COUNTY.

EDGAR WHITE:—St. Clair county is principally valuable on account of the pine timber. Still the county never began to live until the lumberman and stave-maker stripped the land. The agricultural land is rated at second, third, and fourth rate. We are neither rich or poor. In April, 1880, the board of supervisors determined that the land should be assessed at its true cash value. We have no mines or minerals; our manufactures are small. We trust the board will do us justice on the equalization. About fifty counties were in excess of St. Clair in 1876, and about twenty below it. We have three railroads, not competing rords. We have navigable facilities on the east, but we do not export much; we consume it ourselves. St. Clair county is one of the oldest counties in the State. It was valuable on account of its timber, consisting chiefly of pine, and some oak. Now the timber is all gone, its pine by the lumberman, its oak by the stave-makers, and black ash by the hoop-makers. The land as agricultural land was rated as second, third, and fourth rate. The swamps and low, wet lands if concentrated would take in about one-fourth of some of the old counties which have about the same amount of taxable acres. Still St. Clair county has always, since 1851, every five years, come here with an increase in her valuation from $997,000 to $4,600,000 in 1876, now with over $11,000,000, and as the State of Michigan grows so we grow with it. We are neither rich nor poor. In April, 1880, the board of supervisors held a meeting and resolved to appoint a committee. I think we have more than fully met the requirements of the law. We have no mines or minerals. Our manufactures are small; one woolen, one stave, one spoke, two or three small planing mills, one flouring mill, perhaps six or eight small grist

mills. We make no comparisons with other counties—trust to the board to do us justice on the equalization. On comparison with State equalization of 1876, I find about fifty counties which are in excess of that, and about twenty counties below it. We have no State capitol, no agricultural college, no asylum, no board, no State prison. Our board of supervisors has often thought that if they could get one of the State institutions it would help us; but if it should have the effect on us that it has on the counties that now have them, we should be growing poorer. And we have three railroads, one southwest, one west, one north and west, not competing roads. We have navigable facilities on the east, but our principal drawback is we don't raise much to export, we consume it ourselves mostly. Although our lands are poor for agricultural purposes, we won't run them down, hoping to induce some of these present to buy.

ST. JOSEPH COUNTY.

A. P. EMERY:—Mr. Chairman, and Gentlemen of the Board—St. Joseph county may properly be called an agricultural county. Its manufacturing interests, comparatively speaking, are nothing. For the last five years it has not increased in population, improvements, and manufacturing interests in the same proportion that other counties in the State have. I might perhaps properly, too, compare the value of our farm and farm products, the number of acres assessed, as well as the amount of capital invested in manufacturing, with other counties, and ascertain the relative standing of the county with that of others, but as you have the means of ascertaining these facts and figures before you in tabular form, I deem it unnecessary. St. Joseph counties has a variety of soils; it, too, has its share of light, sandy soil, its marshes, meandered lakes and rivers. Many of its marshes are not susceptible of drainage. We have some fine sections of lands—as fine as any in the State, and as productive, too. These lands are capable of producing large crops of wheat and corn, but not so well adapted to the raising of barley and oats. At least sixty per cent of our farming lands are level and unprotected by forests. The result is that our wheat is liable to be winter-killed. Such was the case last winter. The average yield per acre in the county this season will not exceed four bushels. This, gentlemen, is a low estimate—it is a correct one, nevertheless. St. Joseph county is composed of sixteen townships, four of which are fractional on the State line, making but a fraction over fourteen full townships. This small area I trust the board will take into consideration. The number of acres assessed is 312,844. This includes the surface of many small lakes and rivers, as well as a large amount of low, swampy lands that are considered worthless—yet taxed. These are not meandered, and add to the aggregate of our taxable lands, but not to the productive area. The "religious, or revival wave," referred to here yesterday by the delegate from Eaton county, reached St. Joseph county two years ago last spring. The supervisors then became conscience stricken, and have since then assessed the property of the county, both real and personal, as the law directs, "at its true cash value." The aggregate valuation of the county, as equalized by the board of supervisors at the June meeting, is $16,103,845. Its taxable lands are assessed at an average of $42.04 per acre, making St. Joseph county fifth in the list of the valuation of its taxable lands per acre. She is also fifth in the list of personal property per capita, while Jackson county ranks (if I mistake not) twenty-ninth in average rate per acre, and fifty-seventh in personal property per capita. I might compare with other counties, but this is sufficient, as I do not wish to take up your time unnecessarily. St. Joseph county assessed its

property on a cash basis—at least the supervisors intended to assess on a cash basis, but I, as well as others in the county, are well satisfied that the property of the county would not sell to-day for cash what it was equalized at, whereas it is very evident that the taxable property of Jackson and a few other counties in the State has not been assessed on this basis. This, gentlemen of the board, is for you to determine and not me. It is not pleasant to resort to comment or criticism in this direction, but the interest of the county I represent here to-day, as well as that of the whole State, demands it, under the existing circumstances, at this time and place. I am heartily glad, as a citizen of this State, that this only honorable and legal system of taxation is rapidly growing in favor and is as generally practiced throughout the State as it is. We cannot boast of large and prosperous cities and villages, where large manufacturing interests are carried on, necessarily requiring a large amount of capital and labor, as Kalamazoo, Calhoun, Jackson, and many other counties in the State can and do. Three villages of any importance are all that can be found within its borders. These have a population of only about 6,000 in the aggregate. I see there is a disposition on the part of some of the delegates from the more northern or newer counties of the State to depreciate their counties, and are endeavoring to show, or at least intimating, that the southern counties of the State are increasing more rapidly in wealth and various industries than theirs. Facts and figures show this to be the reverse. The increase of the population in the State for the last ten years has mostly been in the newer counties and not in the older ones. For instance, St. Joseph county has decreased in population since 1870, while the population of the State has in the meantime increased thirty-eight per cent. It is said that the wealth of a State or nation consists principally in its population. The northern counties for the last five years or more have drawn largely their population and wealth from the counties in the south part of the State. In passing through the northern part of the State some time ago I was struck with the wonderful development of that country. All along the line of railroads numerous villages are springing up. Farms are opening up; lumbering, as well as other industries, is being developed. Some of those counties have doubled their population since 1876. If it be true—which undoubtedly it is—that the actual value of one county can be very closely approximated with that of another similarly situated from the population, number of acres assessed, cereal products, and manufacturing interests, etc., then, in my opinion, the relative value of St. Joseph county as compared with Cass and Branch counties is equal or nearly so, and the equalization made by the State board in 1876 of these counties was just and equitable. But I have come to the conclusion, after a thorough examination of the statements distributed among the delegates at this meeting and other authenticated tables and personal observation, that, as compared with Van Buren, Kalamazoo, Calhoun, Clinton, Jackson, and many of the northern counties, the equalization made by the State board in 1876 is relatively unequal as it now stands, and cannot, in justice to the first named counties, be taken as a basis of equalization by the present board. Having the utmost confidence in the judgment and integrity of this honorable board, with this statement I leave the matter with you, feeling assured that the county which I represent here will be justly dealt with as to the equalization of its property with that of other counties. This we ask, and this we expect.

TUSCOLA COUNTY.

J. L. RICHARDSON:—Mr. Chairman and Gentlemen of the Board of Equalization—The population of Tuscola county is now nearly 26,000. The average rate per acre of her assessment, taking the improved and unimproved lands together, is about $13.50, which may at first seem small, but when it is considered that more than half of her lands are yet wild and that a considerable portion of her improved land is recently improved, stumpy, and without valuable buildings and bearing orchards, the average will not, I think, as compared with other counties, be found too light. While a considerable portion of her territory is excellent farming land, I wish to call your attention to the fact that there is a broad belt of light, sandy, hemlock land of from three to five miles in width extending across the county along the Cass river, much of which is the very poorest quality of land. Much of the improved land outside of the hemlock belt is covered with pine stumps. This is true of at least one-fourth of the township of Tuscola and most of the towns along the rivers and creeks. This indicates a rather light soil and detracts from the value of the land in other respects, as it costs as much to get rid of the pine stumps as it does to clear the land aside from the stumps. There are also several thousand acres along that portion of the bay shore which lies within the limits of our county which are so low and wet as to be comparatively worthless. Although formerly rich in pine and other valuable timbers, these are now mostly removed. A large portion of the wild land is of little value for wood, the original growth of timber having been destroyed by the great fire of several years ago. It should be remarked, too, that her facilities for marketing her products are by no means as great as those of the more southern counties. She has but two villages of any considerable size, Caro and Vassar, whose populations are about 2,000 each. Besides these there are five or six small villages of from two to three hundred each. The manufacturing interests of these places are no greater than are to be found in places of the same size throughout the State. I would like to avoid making comparisons unfavorable to other counties, but it seems to me that the statement of the several assessments affords occasion for such comparisons not to be passed by. Sanilac, for instance, shows more acres than Tuscola—almost as many improved acres—(98,000 to 100,000) and a somewhat larger population than Tuscola, while her average rate of assessment per acre is less than half that of Tuscola. Saginaw has more acres than Tuscola—almost as many improved acres—(in round numbers 91,000 against 100,000 for Tuscola) and it cannot be fairly denied that her farming lands are as good as any in the State, and that they comprise nearly the whole of her territory. She has very little pine and hemlock land within her borders, yet she is rated lower than Tuscola, her average being about $10.50 against $13.50 for Tuscola. Others might be mentioned, but presuming the board will look carefully after these matters, I will only trouble you with a brief mention of some others whose average is much larger than that of my own county. I find that Van Buren is rated at $27.00 per acre, or about double the rate of Tuscola; but she has almost double the number of improved acres. She is an old county, her improvements are old, her lands fully subdued, free from stumps and enhanced in value by good buildings, old orchards, excellent facilities for marketing produce, etc. The same is true of Wayne, Washtenaw, Macomb, and others. Gentlemen, I think I have said all that is necessary. I only ask for Tuscola that she be placed in the scale where of right she ought to be, and relying

upon your good judgment and fairness, I leave the interests of her citizens with you.

VAN BUREN COUNTY.

S. P. WILSON:—I think it unfortunate for Van Buren county that she comes so far down in the list of counties, for after listening to the reports from so many counties I am at a loss to know what to say in behalf of Van Buren. I shall not, however, plead poverty. Van Buren will average well with other counties in that part of the State—no better and perhaps no worse. I wish to make a few statements I deem worthy of the consideration of this board. You are informed by the statement made in 1876 that our assessments were fully eighty per cent of the cash value of the real estate and personal property. Since that time (by a called session of the board of supervisors) a resolution was passed raising the assessments fifty per cent, and the basis of equalization was placed at twelve million, which is thought by many to be far too high. Prior to 1876 many townships accessible to the railroads and lake invested largely in fruit lands, expending a large amount of money in setting peach trees and in raising them to maturity. The severe winters and the disease known as the yellows have entirely destroyed many of our best peach orchards, and injuring all to a greater or less extent, completely discouraging and blasting the hopes of many of our exclusive fruit-growers; none are so sanguine of success as they were a few years ago. I apprehend that no injustice will be done Van Buren county by this board.

WASHTENAW COUNTY.

CHAS. H. RICHMOND:—In 1851 the equalized valuation of Washtenaw county was a little over $2,000,000.00; in 1876 it was raised to $30,000,000.00. In my remarks I shall not say anything to depreciate, in your judgment, the value of the real and personal property of Washtenaw county. I live in a rich and valuable county. Washtenaw is composed of twenty townships, embracing an area of 431,391 acres of land, exclusive of the cities, which has been assessed at an average of $44.40 per acre and equalized by you at a fraction over $45.00 an acre, an average above all other counties excepting Wayne and Kalamazoo, and the tax is above that of Kalamazoo when you take the number of acres into consideration. We have, in our county, fair railroad facilities, two roads traversing the county, one north and south, the other east and west. We have a fair share of manufactures, not extensive, with the exception of one, that of paper making. We have rich farms—some superior lands. We have, also, our full share of lakes and rivers, with a sufficiency of waste lands along their borders. There is, in one section of the county, about 2,000 acres of swamp land. It will, in time, become equal if not superior to the majority of the other lands in the county. We have, also, a public institution in the county, which we think has been a damage to us. These are substantially the facts in regard to Washtenaw county. All I ask is, place Washtenaw on the roll where she should stand. You have an honest, fair, and equitable assessment sent you.

WAYNE COUNTY.

JOHN D. STANDISH:—We think we have a beautiful county, and especially a beautiful city, and one of wealth. We have, what may be deemed by some, drawbacks. We have a noble river that takes a good deal of our valuable property, but we, in Detroit, do not think it depreciates much from our me-

tropolis. (Reads from written statement.) Some bank stocks are taxed twenty-five per cent more than the original cost of the stock. Our lands are equalized more than any other county in the State. There is a belt of land running from Royal Oak round the city with soil as light as that complained of in the northern part of the State. There has been on this land large bodies of timber which has been cut very largely. Digging down a foot you come to quicksand and water. It is understood generally that lands in Wayne county are poor lands. To-day I can buy lands within twenty miles of Detroit that have been cultivated thirty or forty years for $20.00, $25.00, and $30.00 an acre, including buildings. Our farm buildings will not compare with those in other counties of the State, and yet I find that the assessments are $50.00 an acre When I saw it I thought it was a mistake. I know that the lands cannot be sold for any such sum. We have a personal assessment of $147.00 per capita. Although there are large capitalists, we have a very large class that the county and city have to support; not only paupers of our own, but from abroad, and our county houses and county insane asylum are continually full. All these things help make up a population, but do not contribute in the least toward the taxes. We realize the benefit of our manufactories. It would be thought by passers by that this was a great indication of wealth and source of revenue, but many of these manufactories we would be very glad to get rid of in many respects. Within the last week a fund is being provided to commence suits against one of the largest factories in the city for the nuisance. It is a new institution, employing a great many men, and is said to consume 3,000 bushels of corn a day, but the fermentation in the process of their manufacture produces a nuisance. The manufactories require a great many men. These men pay no taxes. All the benefit derived from them is they consume the produce and make trade for the merchants. In regard to the manufactures, they pass through and are not subject to taxation to any extent. We were in the habit of taxing thirty or forty per cent, but it was discovered that we must tax dollar for dollar. I do not believe that for five years to come the real valuation of the State will be greatly enhanced. I do not think that these northern counties are going to improve as many anticipate. Some of those counties are not worth what they are assessed at. Wayne county has voluntarily added $20,000,000.00 since the last equalization. We are now $117,000,000.00; it was then about $97,000,000.00. In the general equalization in 1861 we were put down at about an eighth. When $172,000,000.00 was the valuation of the State ours was $23,000,000.00. In 1876 we were put down at $97,000,000.00—an enormous increase—about one-sixth of the assessment of the whole State. Think of it! With Grand Rapids and other towns almost half as large as Detroit. We did not complain; we are satisfied to pay these taxes; we collect them readily.

JAS. H. VISGER:—There are 36,000 acres of marsh lands in Wayne county. An attempt has been made in the township of Grosse Point to reclaim certain marshes on the border of the Detroit river. It was made at a cost of $50.00 per acre. They are not yet reclaimed, and there are grave doubts entertained as to whether they ever will be. If they were dry they would be the most valuable lands in Wayne county, for the reason that they border on the Detroit river. Considering those lands worthless at the present time, deducting 36,000 acres would make the average per acre $66.00 instead of $51.00. The farming lands of Wayne county are of inferior quality compared to lands in other counties. We have the 10,000 acre tract in the townships of Hamtramck and Greenfield,

which is not much better than the marsh lands below. It is quicksand, as we call it, and must be manured yearly, otherwise it will bear no crops. We have two or three townships which are composed of very good lands.

*Question*—Did I understand you to say that the valuation in the city of Detroit was upon a cash basis?

*Mr. Standish*—Yes, sir; strictly so.

*Question*—And the bank stock assessed at par?

*Answer*—The price on the market. It is assessed for what the stock is worth.

*Mr. Visger*—Stocks in my township are also assessed at their cash value.

O. M. Barnes, delegate from Ingham, stated that the stock in Lansing was also assessed at its cash value.

The following was presented in writing by the delegates from Wayne county:

*To the Honorable State Board of Equalization:*

The undersigned, delegates from the board of supervisors of Wayne county, respectfully submit: That the city of Detroit and our several towns have made full and fair assessments of the various properties of our county, including all personal estate, stocks, bonds, and mortgages (possible to discover), and have voluntarily raised our valuation more than twenty millions of dollars since the last meeting of your board. Our real estate outside of our cities is assessed at an average of more than $50 per acre, and higher than in any other county in the State, although inferior in quality to many of the counties. A much larger personal assessment, comparatively, has also been made than other counties. Our supervisors and assessors are endeavoring in all respects to conform to the law, to regard their oaths of office, and to make their taxes indisputably legal and satisfactory. We suggest that while we rejoice in our own prosperity, and our disposition to perfect our system of taxation, we also rejoice in the general prosperity of the State, and insist that old agricultural counties should also voluntarily correct their assessment lists, and thus cheerfully contribute their full share of the State expenses. Failing to do this provides a great provocation to the more generous and honorable localities. In reviewing the returns of the various counties represented at this convention, we are impressed with the importance that in a proper equalization for the coming term of years the valuation of many of the counties here represented should be materially raised, not only from their assessments of 1881, but also from the equalized valuation of 1876. If the supervisors of all our counties will regard the law and their own oaths in the valuation of property assessed the State would cease to be encumbered with worthless tax-titled lands and our counties disencumbered of embarrassing debts on their account. The old fogy system of assessing but a part of the property, and that part at one-quarter or one-half its cash value, is exploded, and should be abandoned, or severe penal laws enacted to enforce conformity to the law. We respectfully submit that, in view of the returns here made, twenty millions of dollars should be deducted from our reported assessments—unless a material addition is made to the general State valuation.

JOHN D. STANDISH, *City Assessor*,
JAMES A. VISGER, *Supervisor of Hamtramck*,
*Wayne County Delegates.*

WEXFORD COUNTY.

J. W. HOTALING:—Cedar Creek township, lying on the Grand Rapids and Indiana railroad, is one-half farming land, the rest pine stump land. We have a mill there cutting 30,000 feet a day, which takes the valuation out of the township. Liberty township, on the Manistee river, is about one-fourth agricultural land; the rest is pine land, with the pine all gone. Greenwood is three-fourths swamp and pine. Hanover is about one-eighth good land, the rest fire land, stump land, and pine. Wexford, the best township in the county, has some good farming land. South Branch township is all fire land. Henderson township is very good. We had seventeen townships in 1876,—to-day sixteen.

O. M. Barnes, delegate from Ingham, wished to speak a few words for two or three counties that were not represented, as he was personally interested. He said:

The reason I make any remarks is because I do not quite agree with some remarks that have been made in relation to some of the northern counties, especially those where the main value is timber. Many think that in spite of the removal of the timber they remain of some value. I think that is an error. There is now being taken out of the State at least $2,000,000 every year. Unless the settlement adds a corresponding amount there will be an actual depreciation of value in those counties. I agree that many of the pine lands, after the pine is removed, may be made good farming lands; but that statement must not be made too broad. Pine grows on varied soils; you do not always find it on the light soils. The district embraced in the lower part of the Saginaw Valley is one thing, and that which is more than 100 feet above the Saginaw Bay is quite another thing, so far as the value is concerned. All writers upon soils agree that at least three-fourths of the value of the soil is derived from the geological strata. You must look to the geological formation of the district where pine is grown in order to estimate its ultimate value for agricultural purposes. I have had the selling of over $1,000,000 of pine land this year, and I know the men who buy will give you next to nothing for it. In the lower level, within fifty or 100 feet above the lake, you may find tracts of pine worth $30, $40, and $50 an acre, and the land is worth something after the pine is taken off, but it is only after the expensive operation of removing the stumps. Crawford and Roscommon counties, in my opinion, will not be worth near as much with the pine removed as they are to-day with the pine on, and it is being rapidly removed from both of those counties. Fifteen years will not bring that land up to the value it has with the pine on.

## TABLE I.—ALCONA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Alcona for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Curtis | 44,205.18 | $159,076 00 | $159,076 00 | $5,287 00 | $164,363 00 |
| Alcona | 145,306.85 | 895,519 00 | 895,519 00 | 82,275 00 | 977,794 00 |
| Harrisville | 131,941.69 | 1,144,254 00 | 1,144,254 00 | 54,965 00 | 1,199,219 00 |
| Greenbush | 45,043.76 | 146,141 00 | 146,141 00 | 4,990 00 | 151,131 00 |
| Totals | 366,497.48 | $2,344,990 00 | $2,344,990 00 | $147,537 00 | $2,492,527 00 |

STATE OF MICHIGAN, }
COUNTY OF ALCONA, } ss.

We, George Hamilton, Chairman, and George Rutson, Clerk of the Board of Supervisors of the County of Alcona, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Alcona aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the office of the County Clerk in the County of Alcona on the thirteenth day of June, A. D. 1881.

IN TESTIMONY WHEREOF, we have hereunto subscribed our names, and affixed the Seal of said County, this fourteenth day of June, A. D. 1881.

{ L. S. }

GEORGE HAMILTON,
*Chairman Board of Supervisors of Alcona County.*

GEORGE RUTSON,
*Clerk of Board of Supervisors of Alcona County.*

## TABLE II.—ALLEGAN COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Allegan for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Allegan | 20,560.00 | $635,059 00 | $959,667 00 | $240,333 00 | $1,200,000 00 |
| Casco | 23,835.00 | 246,705 00 | 315,725 00 | 27,275 00 | 343,000 00 |
| Cheshire | 20,066.00 | 290,160 00 | 289,500 00 | 43,500 00 | 333,000 00 |
| Clyde | 22,345.00 | 65,360 00 | 71,260 00 | 8,240 00 | 79,500 00 |
| Dorr | 22,794.00 | 273,958 00 | 305,200 00 | 41,800 00 | 347,000 00 |
| Fillmore | 23,018.00 | 329,240 00 | 331,889 00 | 68,111 00 | 400,000 00 |
| Ganges | 20,390.00 | 202,450 00 | 280,095 00 | 29,905 00 | 310,000 00 |
| Gun Plain | 22,224.00 | 752,050 00 | 724,070 00 | 197,930 00 | 922,000 00 |
| Hopkins | 22,976.00 | 362,665 00 | 329,510 00 | 52,490 00 | 382,000 00 |
| Heath | 22,300.00 | 60,955 00 | 53,828 00 | 16,172 00 | 70,000 00 |
| Laketown | 13,715.00 | 104,360 00 | 86,660 00 | 17,340 00 | 104,000 00 |
| Lee | 22,032.00 | 61,220 00 | 58,815 00 | 11,185 00 | 70,000 00 |
| Leighton | 22,380.00 | 672,065 00 | 270,490 00 | 79,510 00 | 350,000 00 |
| Manlius | 21,887.00 | 145,175 00 | 97,695 00 | 31,305 00 | 129,000 00 |
| Martin | 22,539.00 | 590,920 00 | 461,515 00 | 105,985 00 | 567,500 00 |
| Monterey | 22,428.00 | 489,338 00 | 507,084 00 | 60,416 00 | 567,500 00 |
| Overisel | 22,600.00 | 303,080 00 | 342,050 00 | 53,950 00 | 396,000 00 |
| Otsego | 21,982.00 | 640,438 00 | 604,255 00 | 133,745 00 | 738,000 00 |
| Pine Plains | 23,040.00 | 72,530 00 | 63,675 00 | 11,325 00 | 75,000 00 |
| Salem | 22,674.00 | 294,665 00 | 320,235 00 | 39,765 00 | 360,000 00 |
| Saugatuck | 15,260.00 | 333,420 00 | 284,800 00 | 102,200 00 | 387,000 00 |
| Trowbridge | 22,122.00 | 302,255 00 | 373,880 00 | 42,620 00 | 416,500 00 |
| Watson | 21,680.00 | 378,430 00 | 373,800 00 | 62,700 00 | 436,500 00 |
| Wayland | 21,273.00 | 332,530 00 | 275,000 00 | 45,000 00 | 320,000 00 |
| Totals | 516,120.00 | $8,129,528 00 | $7,780,698 00 | $1,522,802 00 | $9,303,500 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF ALLEGAN, }

We, Leonard Bailey, Chairman, and Lizzie R. Smith, Clerk of the Board of Supervisors of the County of Allegan, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Allegan aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the County Clerk's office in the village of Allegan, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 25th day of June, A. D. 1881.

LEONARD BAILEY,
*Chairman Board of Supervisors of Allegan County.*

LIZZIE R. SMITH,
*Clerk of Board of Supervisors of Allegan County.*

## TABLE III.—ALPENA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Alpena for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| City of Alpena | 4,000.00 | $1,208,662 50 | $596,325 00 | $968,675 00 | $1,585,000 00 |
| Alpena | 54,680.37 | 80,096 00 | 96,825 00 | 13,175 00 | 110,000 00 |
| Long Rapids | 71,973.69 | 271,077 00 | 271,077 00 | 18,923 00 | 290,000 00 |
| Ossineke | 73,937.00 | 218,245 00 | 218,245 00 | 6,755 00 | 222,000 00 |
| Greene | 34,288.00 | 128,480 00 | 128,480 00 | 5,520 00 | 134,000 00 |
| Wilson | 40,313.54 | 70,231 00 | 149,331 00 | 6,669 00 | 156,000 00 |
| Totals | 279,242.60 | $1,976,791 50 | $1,460,283 00 | $1,039,717 00 | $2,500,000 00 |

STATE OF MICHIGAN, }
COUNTY OF ALPENA, } ss.

We, Albert Pack, Chairman, and Michael O'Brien, Clerk, of the Board of Supervisors of the County of Alpena, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Alpena and State aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the City of Alpena, in the County of Alpena, on the seventh day of July, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this seventh day of July, A. D. 1881.

ALBERT PACK,
*Chairman Board of Supervisors of Alpena County.*

MICHAEL O'BRIEN,
*Clerk of Board of Supervisors of Alpena County.*

## TABLE IV.—ANTRIM COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Antrim for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Banks | 28,012.71 | $183,145 00 | $183,145 00 | $14,233 00 | $197,378 00 |
| Central Lake | 18,131.67 | 96,080 00 | 102,388 00 | 13,860 00 | 116,248 00 |
| Chestonia | 39,088.01 | 184,972 00 | 207,168 64 | 15,621 36 | 222,790 00 |
| Custer | 21,145.79 | 109,627 00 | 109,627 00 | 10,475 00 | 120,102 00 |
| Echo | 19,839.37 | 106,380 00 | 107,515 00 | 7,990 00 | 115,505 00 |
| Elk Rapids | 3,763.40 | 233,497 00 | 233,497 00 | 245,671 00 | 479,168 00 |
| Forest Home | 12,858.90 | 121,540 00 | 97,232 00 | 8,235 00 | 105,467 00 |
| Helena | 12,143.35 | 61,301 00 | 64,366 00 | 9,640 00 | 74,006 00 |
| Jordan | 36,409.62 | 184,824 00 | 184,924 00 | 23,697 00 | 208,621 00 |
| Kearney | 20,642.08 | 116,714 00 | 116,714 00 | 6,170 00 | 122,884 00 |
| Mancelona | 43,957.70 | 208,392 75 | 250,085 25 | 35,277 00 | 285,312 25 |
| Milton | 20,655.29 | 107,480 00 | 123,601 00 | 12,800 00 | 136,401 00 |
| Torch Lake | 4,059.09 | 31,550 00 | 44,170 00 | 9,730 00 | 53,900 00 |
| Totals | 280,656.98 | $1,739,472 75 | $1,824,282 89 | $413,399 36 | $2,237,682 25 |

STATE OF MICHIGAN, }
COUNTY OF ANTRIM, } ss.

We, John B. Hartwell, Chairman, and John A. Harriman, Clerk, of the Board of Supervisors of the County of Antrim, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Antrim aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Bellaire, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 16th day of June, A. D. 1881.

JOHN B. HARTWELL,
*Chairman Board of Supervisors of Antrim County.*

JOHN A. HARRIMAN,
*Clerk of Board of Supervisors of Antrim County.*

## TABLE V.—BARAGA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Baraga for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Arvon | 52,535.24 | $70,955 00 | $70,955 00 | $400 00 | $71,355 00 |
| Baraga | 79,647.15 | 88,978 00 | 87,978 00 | ---------- | 88,978 00 |
| L'Anse | 108,799.72 | 291,043 00 | 291,043 00 | 13,675 00 | 304,718 00 |
| Spurr | 90,549.20 | 173,905 00 | 173,905 00 | 700 00 | 174,605 00 |
| Totals | 331,531.31 | $624,881 00 | $624,881 00 | $14,775 00 | $639,656 00 |

STATE OF MICHIGAN, }
COUNTY OF BARAGA, } ss.

We, Edwin L. Mason, Chairman, and Oscar J. Foot, Clerk of the Board of Supervisors of the County of Baraga, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Baraga aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Clerk's office in the village of L'Anse, on the thirteenth day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this fourteenth day of June, A. D. 1881.

E. L. MASON,
*Chairman Board of Supervisors of Baraga County.*

OSCAR J. FOOT,
*Clerk of Board of Supervisors of Baraga County.*

## TABLE VI.—BARRY COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Barry for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Assyria | 22,652.44 | $472,695 00 | $524,691 00 | $70,005 00 | $594,696 00 |
| Baltimore | 22,780.75 | 430,720 00 | 486,713 00 | 57,330 00 | 544,043 00 |
| Barry | 22,011.00 | 617,590 00 | 629,941 00 | 112,460 00 | 742,401 00 |
| Carlton | 22,057.83 | 686,570 00 | 604,182 00 | 63,980 00 | 668,162 00 |
| Castleton | 21,391.75 | 774,380 00 | 720,174 00 | 120,480 00 | 840,654 00 |
| Hastings | 19,007.80 | 554,725 00 | 543,631 00 | 82,384 00 | 626,015 00 |
| Hastings City— | | | | | |
| 1st and 4th Wards | 2,431.00 | 330,180 00 | 320,275 00 | 125,320 00 | 445,595 00 |
| 2d and 3d Wards | 660.00 | 461,740 00 | 447,888 00 | 169,580 00 | 617,468 00 |
| Hope | 21,888.60 | 390,580 00 | 421,826 00 | 29,810 00 | 451,636 00 |
| Irving | 22,720.00 | 489,180 00 | 577,173 00 | 59,480 00 | 636,653 00 |
| Johnstown | 22,055.00 | 648,050 00 | 648,050 00 | 61,825 00 | 709,875 00 |
| Maple Grove | 22,612.94 | 569,930 00 | 558,532 00 | 64,015 00 | 622,547 00 |
| Orangeville | 21,833.87 | 370,300 00 | 359,191 00 | 49,200 00 | 408,391 00 |
| Prairieville | 20,464.29 | 716,500 00 | 716,500 00 | 116,970 00 | 833,470 00 |
| Rutland | 22,653.00 | 522,295 00 | 544,226 00 | 42,875 00 | 587,101 00 |
| Thornapple | 22,230.00 | 803,850 00 | 755,619 00 | 129,640 00 | 885,259 00 |
| Woodland | 22,364.00 | 670,770 00 | 643,940 00 | 103,160 00 | 747,100 00 |
| Yankee Springs | 19,968.00 | 311,925 00 | 293,210 00 | 51,015 00 | 344,225 00 |
| Totals | 352,302.32 | $9,822,930 00 | $9,795,762 00 | $1,509,529 00 | $11,305,291 00 |

STATE OF MICHIGAN, }
COUNTY OF BARRY, } ss.

We, Orson Swift, Chairman, and Enoch Andrus, Clerk, of the Board of Supervisors of the County of Barry, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Barry aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the City of Hastings, on the thirteenth day of June, A. D. 1881.

{ L.S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this eighteenth day of June, A. D. 1881.

ORSON SWIFT,
*Chairman Board of Supervisors of Barry County.*

ENOCH ANDRUS,
*Clerk of Board of Supervisors of Barry County.*

## TABLE VII.—BAY COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Bay for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Arenac | 30,778.25 | $78,695 00 | $89,965 00 | $10,135 00 | $100,100 00 |
| Au Gres | 32,072.40 | 94,488 00 | 103,486 00 | 16,414 00 | 119,900 00 |
| Bay City | ---------- | 6,332,850 00 | 4,742,776 00 | 2,058,224 00 | 6,801,300 00 |
| Bangor | 4,048.06 | 84,374 00 | 112,745 00 | 1,655 00 | 114,400 00 |
| Beaver | 20,116.75 | 57,905 00 | 65,160 00 | 3,040 00 | 68,200 00 |
| Clayton | 20,136.07 | 66,730 00 | 72,265 00 | 2,535 00 | 74,800 00 |
| Deep River | 45,522.13 | 209,430 00 | 216,445 00 | 7,955 00 | 224,400 00 |
| Fraser | 43,686.55 | 84,556 00 | 73,325 00 | 1,475 00 | 74,800 00 |
| Hampton | 16,297.00 | 379,088 00 | 350,880 00 | 29,720 00 | 380,600 00 |
| Kawkawlin | 30,209.20 | 234,113 00 | 245,390 00 | 4,310 00 | 249,700 00 |
| Lincoln | 37,229.82 | 230,405 00 | 245,300 00 | 4,400 00 | 249,700 00 |
| Moffat | 20,613.78 | 53,495 00 | 64,750 00 | 150 00 | 64,900 00 |
| Merritt | 20,170.45 | 152,945 00 | 198,325 00 | 2,975 00 | 201,300 00 |
| Mason | 20,485.00 | 88,620 00 | 70,360 00 | 4,440 00 | 74,800 00 |
| Monitor | 19,966.36 | 236,475 00 | 244,895 00 | 4,805 00 | 249,700 00 |
| Portsmouth | 12,633.90 | 234,628 00 | 246,996 00 | 13,704 00 | 260,700 00 |
| Pinconning | 47,409.16 | 167,775 00 | 170,050 00 | 4,850 00 | 174,900 00 |
| Standish | 16,802.16 | 86,925 00 | 75,630 00 | 4,670 00 | 80,300 00 |
| Williams | 22,621.53 | 162,341 00 | 193,522 00 | 6,678 00 | 200,200 00 |
| West Bay City | ---------- | 1,203,780 00 | 759,360 00 | 365,940 00 | 1,125,300 00 |
| Whitney | 26,164.87 | 96,495 00 | 103,410 00 | 6,590 00 | 110,000 00 |
| Totals | 486,970.43 | $10,346,218 00 | $8,445,035 00 | $2,554,965 00 | $11,000,000 00 |

STATE OF MICHIGAN, }
COUNTY OF BAY, } ss.

We, Nathan Knight, Chairman, and W. M. Kelley, Clerk, of the Board of Supervisors of the County of Bay, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Bay aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the city of Bay City, in the County of Bay, on the second day of August, A. D. 1881.

L. S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this third day of August, A, D. 1881.

N. KNIGHT,
*Chairman Board of Supervisors of Bay County.*

W. M. KELLEY,
*Clerk of Board of Supervisors of Bay County.*

## TABLE VIII.—BENZIE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Benzie for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Almira | 21,672.97 | $87,203 00 | $47,090 00 | $7,905 00 | $54,995 00 |
| Benzonia | 16,506.13 | 147,365 00 | 169,250 00 | 23,535 00 | 192,785 00 |
| Blaine | 12,030.98 | 37,745 00 | 38,600 00 | 5,005 00 | 43,605 00 |
| Crystal Lake | 8,698.24 | 279,233 00 | 206,634 00 | 87,835 00 | 294,467 00 |
| Colfax | 18,731.65 | 40,371 00 | 44,812 00 | 1,540 00 | 46,352 00 |
| Gilmore | 4,401.00 | 128,055 00 | 89,639 00 | 69,847 00 | 159,486 00 |
| Homestead | 17,896.00 | 62,092 00 | 57,746 00 | 5,440 00 | 63,186 00 |
| Inland | 26,580.00 | 49,096 00 | 43,114 00 | 8,400 00 | 51,514 00 |
| Joyfield | 12,793.00 | 51,760 00 | 47,878 00 | 4,695 00 | 52,573 00 |
| Lake | 8,862.72 | 17,425 00 | 22,837 00 | 783 00 | 23,620 00 |
| Platte | 19,088.00 | 45,291 00 | 46,423 00 | 4,960 00 | 51,383 00 |
| Weldon | 12,073.66 | 43,845 00 | 46,476 00 | 1,360 00 | 47,836 00 |
| Totals | 180,829.45 | $969,481 00 | $905,389 00 | $216,105 00 | $1,621,494 00 |

STATE OF MICHIGAN, }
COUNTY OF BENZIE, } ss.

We, C. T. Hopkins, Chairman, and A. T. Case, Clerk, of the Board of Supervisors of the County of Benzie, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Benzie aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the town of Benzonia, on the fifteenth day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this fifteenth day of June, A. D. 1881.

C. T. HOPKINS,
*Chairman Board of Supervisors of Benzie County.*

A. T. CASE,
*Clerk of Board of Supervisors of Benzie County.*

## TABLE IX.—BERRIEN COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Berrien for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Buchanan | 19,233 | $919,645 00 | $901,253 00 | $197,592 00 | $1,098,845 00 |
| Bainbridge | 22,106 | 422,190 00 | 431,653 00 | 48,240 00 | 479,893 00 |
| Bertrand | 21,800 | 833,730 00 | 833,730 00 | 168,990 00 | 1,002,720 00 |
| Berrien | 22,743 | 724,535 00 | 652,082 00 | 128,460 00 | 780,542 00 |
| Benton | 21,753 | 816,750 00 | 833,085 00 | 95,100 00 | 928,185 00 |
| Chickaming | 13,799 | 223,405 00 | 218,937 00 | 18,070 00 | 237,007 00 |
| Galien | 13,431 | 276,940 00 | 296,325 00 | 20,850 00 | 317,175 00 |
| Hagar | 11,757 | 196,310 00 | 176,680 00 | 14,370 00 | 191,050 00 |
| Lake | 24,614 | 324,596 00 | 324,596 00 | 33,635 00 | 358,231 00 |
| Lincoln | 13,718 | 314,000 00 | 306,150 00 | 28,530 00 | 334,680 00 |
| New Buffalo | 12,686 | 271,605 00 | 228,149 00 | 40,020 00 | 268,169 00 |
| Niles | 26,032 | 942,785 00 | 952,212 00 | 136,730 00 | 1,088,942 00 |
| Niles City— | | | | | |
| 1st and 4th Wards | ---------- | 601,775 00 | 637,881 00 | 50,310 00 | 688,191 00 |
| 2d and 3d Wards | ---------- | 827,450 00 | 827,450 00 | 201,835 00 | 1,029,285 00 |
| Oronoko | 20,597 | 782,556 00 | 782,556 00 | 126,665 00 | 909,221 00 |
| Pipestone | 23,892 | 378,140 00 | 465,112 00 | 38,195 00 | 503,307 00 |
| Royalton | 12,082 | 321,540 00 | 295,817 00 | 38,360 00 | 334,177 00 |
| St. Joseph | 4,002 | 546,569 00 | 683,236 00 | 147,225 00 | 830,461 00 |
| Sodus | 12,209 | 246,215 00 | 270,836 00 | 17,226 00 | 288,062 00 |
| Three Oaks | 14,631 | 374,690 00 | 352,209 00 | 85,800 00 | 438,009 00 |
| Watervliet | 20,330 | 435,320 00 | 435,320 00 | 58,835 00 | 494,155 00 |
| Weesaw | 23,074 | 396,750 00 | 396,750 00 | 54,880 00 | 441,630 00 |
| Totals | 352,489 | $11,168,516 00 | $11,292,019 00 | $1,749,918 00 | $13,041,937 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF BERRIEN, }

We, James F. Haskins, Chairman, and Walter I. Himes, Clerk of the Board of Supervisors of the County of Berrien, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Berrien aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of Berrien Springs, on the 16th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 24th day of June, A. D. 1881.

JAMES F. HASKINS,
*Chairman Board of Supervisors of Berrien County.*

WALTER I. HIMES,
*Clerk of Board of Supervisors of Berrien County.*

## TABLE X.—BRANCH COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Branch for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Algansee | 21,630 | $394,410 00 | $395,665 00 | $54,335 00 | $450,000 00 |
| Batavia | 21,250 | 456,600 00 | 467,600 00 | 45,400 00 | 513,000 00 |
| Bethel | 22,906 | 409,060 00 | 391,910 00 | 48,090 00 | 440,000 00 |
| Bronson | 22,680 | 564,350 00 | 567,920 00 | 82,080 00 | 650,000 00 |
| Butler | 22,526 | 409,026 00 | 385,265 00 | 50,735 00 | 436,000 00 |
| California | 13,260 | 393,900 00 | 222,770 00 | 45,230 00 | 268,000 00 |
| Coldwater | 18,671 | 593,580 00 | 595,900 00 | 84,100 00 | 680,000 00 |
| Coldwater City— | | | | | |
| 1st Ward | 593 | 434,400 00 | 432,865 00 | 167,135 00 | 600,000 00 |
| 2d Ward | 920 | 355,475 00 | 344,700 00 | 181,300 00 | 526,000 00 |
| 3d Ward | 685 | 396,600 00 | 392,870 00 | 216,130 00 | 609,000 00 |
| 4th Ward | 800 | 381,700 00 | 388,825 00 | 103,175 00 | 492,000 00 |
| Gilead | 12,925 | 222,610 00 | 245,460 00 | 44,540 00 | 290,000 00 |
| Girard | 22,209 | 508,620 00 | 512,380 00 | 64,640 00 | 577,000 00 |
| Kinderhook | 12,242 | 190,615 00 | 213,841 00 | 26,159 00 | 240,000 00 |
| Matteson | 22,697 | 384,040 00 | 386,800 00 | 46,200 00 | 433,000 00 |
| Noble | 13,227 | 218,350 00 | 213,630 00 | 29,370 00 | 243,000 00 |
| Ovid | 20,695 | 377,400 00 | 378,500 00 | 54,500 00 | 433,000 00 |
| Quincy | 21,694 | 787,340 00 | 753,110 00 | 126,890 00 | 880,000 00 |
| Sherwood | 22,129 | 472,290 00 | 481,300 00 | 38,700 00 | 520,000 00 |
| Union | 21,744 | 712,200 00 | 715,310 00 | 159,690 00 | 875,000 00 |
| Totals | 315,433 | $8,593,566 00 | $8,486,601 00 | $1,668,399 00 | $10,155,000 00 |

STATE OF MICHIGAN, }
COUNTY OF BRANCH, } ss.

We, Geo. W. Van Aiken, Chairman, and James R. Dickey, Clerk, of the Board of Supervisors of the County of Branch, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Branch aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the city of Coldwater, on the 15th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 9th day of July, A. D. 1881.

GEO. W. VAN AIKEN,
*Chairman Board of Supervisors of Branch County.*

JAMES R. DICKEY,
*Clerk of Board of Supervisors of Branch County.*

## TABLE XI.—CALHOUN COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Calhoun for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Albion | 21,655 | $1,516,340 00 | $1,610,719 00 | $371,240 00 | $1,981,959 00 |
| Athens | 22,430 | 452,445 00 | 480,247 25 | 103,600 00 | 583,847 25 |
| Battle Creek | 21,097 | 788,450 00 | 834,911 50 | 140,780 00 | 975,691 50 |
| Battle Creek City | 2,200 | 1,908,510 00 | 2,041,087 00 | 743,030 00 | 2,784,117 00 |
| Bedford | 22,331 | 717,820 00 | 757,424 00 | 74,260 00 | 831,684 00 |
| Burlington | 22,082 | 534,490 00 | 564,712 00 | 69,950 00 | 634,662 00 |
| Convis | 22,540 | 542,210 00 | 572,435 00 | 62,290 00 | 634,725 00 |
| Clarence | 19,841 | 203,760 00 | 215,398 50 | 29,010 00 | 244,408 50 |
| Clarendon | 22,430 | 423,445 00 | 447,990 25 | 67,460 00 | 515,450 25 |
| Eckford | 22,183 | 864,390 00 | 913,163 00 | 111,070 00 | 1,024,233 00 |
| Emmet | 21,061 | 809,820 00 | 858,823 50 | 170,250 00 | 1,029,073 50 |
| Fredonia | 22,357 | 497,070 00 | 526,476 75 | 91,065 00 | 617,541 75 |
| Homer | 22,179 | 819,630 00 | 871,568 50 | 219,140 00 | 1,090,708 50 |
| LeRoy | 21,757 | 510,180 00 | 539,204 00 | 71,350 00 | 610,554 00 |
| Lee | 22,389 | 216,000 00 | 228,395 50 | 31,910 00 | 260,305 50 |
| Marshall City | 2,200 | 1,041,160 00 | 1,112,529 00 | 386,229 00 | 1,498,749 00 |
| Marshall | 19,951 | 790,160 00 | 836,231 00 | 131,260 00 | 967,491 00 |
| Marengo | 22,097 | 827,630 00 | 879,710 50 | 213,980 00 | 1,093,690 50 |
| Newton | 23,691 | 500,220 00 | 529,637 00 | 88,120 00 | 617,757 00 |
| Pennfield | 22,624 | 616,590 00 | 650,117 50 | 53,950 00 | 704,067 00 |
| Sheridan | 21,600 | 848,530 00 | 899,948 00 | 179,840 00 | 1,079,788 50 |
| Tekonsha | 21,615 | 573,680 00 | 608,139 50 | 115,510 00 | 723,649 50 |
| Totals | 440,710 | $16,002,480 00 | $16,978,868 25 | $3,525,285 00 | $20,504,153 25 |

STATE OF MICHIGAN, }
COUNTY OF CALHOUN, } ss.

We, Richard Keeler, Chairman, and William F. Neale, Clerk, of the Board of Supervisors of the County of Calhoun, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Calhoun aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the city of Marshall, on the 13th and 14th days of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this sixteenth day of July, A. D. 1881.

RICHARD KEELER,
*Chairman Board of Supervisors of Calhoun County.*

WILLIAM F. NEALE,
*Clerk of Board of Supervisors of Calhoun County.*

NOTE.—The Board of Supervisors did not, at their session of June 13 and 14, 1881, make any report or take any action upon the equalization of the separate townships composing the County of Calhoun, but, as expressing their judgment of the value of the county as a unit, in its relation to the State, added five per cent to the aggregate value of the county, as found by adding together totals, real and personal, of all the assessment rolls of the several supervisors of all the townships and cities in the county, as assessed, and as (in the case of the city of Battle Creek) estimated for this year 1881. The distribution in equal proportion of the added five per cent among all the townships and cities of the county is made for the convenience of the State Board of Equalization upon request of the Auditor General's office, and does not represent the expressed judgment of the board as to the comparative value of the subdivision of the county here represented.

## TABLE XII.—CASS COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Cass for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed | As Equalized. | | |
| Marcellus | 20,835 | $582,520 00 | $595,940 00 | $104,060 00 | $700,000 00 |
| Newburg | 21,627 | 497,850 00 | 574,200 00 | 70,800 00 | 645,000 00 |
| Porter | 32,723 | 1,037,520 00 | 1,047,220 00 | 182,780 00 | 1,230,000 00 |
| Volinia | 21,807 | 912,490 00 | 901,420 00 | 148,580 00 | 1,050,000 00 |
| Penn | 21,468 | 893,535 00 | 1,000,400 00 | 149,600 00 | 1,150,000 00 |
| Calvin | 21,290 | 630,830 00 | 700,820 00 | 99,180 00 | 800,000 00 |
| Mason | 12,952 | 573,880 00 | 547,000 00 | 53,000 00 | 600,000 00 |
| Wayne | 21,814 | 605,570 00 | 689,443 00 | 105,557 00 | 795,000 00 |
| LaGrange | 21,283 | 1,190,200 00 | 1,213,830 00 | 316,170 00 | 1,530,000 00 |
| Jefferson | 21,792 | 736,500 00 | 766,355 00 | 113,645 00 | 880,000 00 |
| Ontwa | 12,530 | 687,025 00 | 663,350 00 | 136,650 00 | 800,000 00 |
| Silver Creek | 20,571 | 600,040 00 | 740,450 00 | 79,550 00 | 820,000 00 |
| Pokagon | 21,984 | 904,790 00 | 947,120 00 | 162,880 00 | 1,110,000 00 |
| Howard | 22,497 | 639,755 00 | 713,290 00 | 66,710 00 | 780,000 00 |
| Milton | 13,456 | 470,825 00 | 487,800 00 | 82,200 00 | 570,000 00 |
| City of Dowagiac | 1,920 | 512,510 00 | 499,100 00 | 320,900 00 | 820,000 00 |
| Totals | 310,549 | $11,475,340 00 | $12,087,738 00 | $2,192,262 00 | $14,280,000 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF CASS, }

We, John Huff, Chairman, and Joseph R. Edwards, Clerk, of the Board of Supervisors of the County of Cass, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Cass aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of Cassopolis, on the 17th day of June, A. D. 1881.

{ L. S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this twentieth day of June, A. D. 1881.

JOHN HUFF,
*Chairman Board of Supervisors of Cass County.*

JOSEPH R. EDWARDS,
*Clerk of Board of Supervisors of Cass County.*

## TABLE XIII.—CHARLEVOIX COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Charlevoix for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Bear Lake | 9,344 | $36,313 00 | $38,128 00 | $2,300 00 | $40,428 00 |
| Boyne Valley | 21,436 | 123,880 00 | 141,223 00 | 16,071 00 | 157,294 00 |
| Charlevoix | 3,353 | 138,527 00 | 138,527 00 | 79,807 00 | 218,334 00 |
| Chandler | 12,981 | 52,372 00 | 50,278 00 | 3,730 00 | 54,008 00 |
| Evangeline | 18,254 | 134,512 00 | 127,797 00 | 22,920 00 | 150,717 00 |
| Eveline | 15,888 | 141,860 00 | 136,185 00 | 64,295 00 | 200,480 00 |
| Hayes | 20,379 | 87,240 00 | 93,346 00 | 13,827 00 | 107,173 00 |
| Hudson | 17,121 | 66,146 00 | 59,432 00 | 6,649 00 | 66,081 00 |
| Marion | 14,048 | 88,950 00 | 92,498 00 | 9,725 00 | 102,223 00 |
| Melrose | 20,243 | 93,964 00 | 93,964 00 | 3,805 00 | 97,769 00 |
| Norwood | 11,405 | 79,020 00 | 79,020 00 | 7,860 00 | 86,880 00 |
| Resort | 4,988 | 25,461 00 | 24,188 00 | 2,835 00 | 27,023 00 |
| South Arm | 21,405 | 131,446 00 | 136,703 00 | 25,159 00 | 161,862 00 |
| Springvale | 11,234 | 45,135 00 | 43,330 00 | 1,545 00 | 44,875 00 |
| Wilson | 20,502 | 120,221 00 | 113,008 00 | 5,696 00 | 118,704 00 |
| Totals | 222,581 | $1,365,047 00 | $1,367,627 00 | $266,224 00 | $1,633,851 00 |

STATE OF MICHIGAN, }
COUNTY OF CHARLEVOIX, } ss.

We, John E. Darrah, Chairman, and A. R. Upright, Clerk, of the Board of Supervisors of the County of Charlevoix, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Charlevoix aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Clerk's Office in the village of Charlevoix, on the 14th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 15th day of June, A. D. 1881.

J. E. DARRAH,
*Chairman Board of Supervisors of Charlevoix County.*

A. R. UPRIGHT,
*Clerk of Board of Supervisors of Charlevoix County.*

## TABLE XIV.—CHEBOYGAN COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Cheboygan for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Burt | 60,478.09 | $244,070 00 | $248,170 00 | $16,830 00 | 265,000 00 |
| Beaugrand | 24,965.07 | 125,831 00 | 114,562 00 | 10,418 00 | 125,000 00 |
| Benton | 5,700.00 | 694,726 00 | 632,037 00 | 417,963 00 | 1,050,000 00 |
| Duncan | 81,388.52 | 102,044 00 | 106,814 00 | 16,186 00 | 123,000 00 |
| Ellis | 90,069.89 | 291,670 00 | 386,830 00 | 3,170 00 | 390,000 00 |
| Grant | 60,400.00 | 199,120 00 | 208,720 00 | 15,280 00 | 224,000 00 |
| Inverness | 19,943.30 | 147,940 00 | 147,938 00 | 42,062 00 | 190,000 00 |
| Munro | 11,434.21 | 34,535 00 | 34,013 00 | 4,987 00 | 39,000 00 |
| Tuscarora | 62,345.20 | 279,405 00 | 279,405 00 | 15,595 00 | 295,000 00 |
| Totals | 416,744.28 | $2,219,341 00 | $2,158,509 00 | $542,491 00 | $2,701,000 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF CHEBOYGAN, }

We, C. A. Gallagher, Chairman, and J. P. Sutton, Clerk, of the Board of Supervisors of the County of Cheboygan, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Cheboygan aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county at their session held at the Court House in the village of Cheboygan on the 16th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 20th day of June, A. D. 1881.

C. A. GALLAGHER,
*Chairman Board of Supervisors of Cheboygan County.*

J. P. SUTTON,
*Clerk of Board of Supervisors of Cheboygan County.*

## TABLE XV.—CHIPPEWA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Chippewa for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Sault Ste. Marie | 375,995 | $1,143,481 00 | $1,143,481 00 | $103,410 00 | $1,246,891 00 |
| Sugar Island | 13,964 | 26,015 00 | 26,015 00 | 7,610 00 | 33,625 00 |
| Detour | 28,638 | 55,610 00 | 55,610 00 | 14,655 00 | 70,265 00 |
| Superior | 86,686 | 194,665 00 | 194,665 00 | 12,625 00 | 207,290 00 |
| Totals | 505,283 | $1,419,771 00 | $1,419,771 00 | $138,300 00 | $1,558,071 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF CHIPPEWA, }

We, Chauncey Montgomery, Chairman, and Geo. W. Brown, Clerk, of the Board of Supervisors of the County of Chippewa, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Chippewa aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of Sault Ste. Marie, on the 13th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 21st day of June, A. D. 1881.

{L. S.}

CHAUNCEY MONTGOMERY,
*Chairman Board of Supervisors of Chippewa County.*

GEO. W. BROWN,
*Clerk of Board of Supervisors of Chippewa County.*

## TABLE XVI.—CLARE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Clare for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | REAL ESTATE. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Greenwood | 22,361.78 | $73,547 00 | $70,000 00 | $1,332 00 | $71,332 00 |
| Sheridan | 46,190.00 | 330,743 00 | 250,000 00 | 7,882 00 | 257,882 00 |
| Grant | 43,074.82 | 593,400 00 | 400,000 00 | 21,680 00 | 421,680 00 |
| Surry | 91,112.16 | 600,775 00 | 475,000 00 | 2,614 00 | 477,614 00 |
| Frost | 40,495.00 | 208,872 00 | 200,000 00 | 2,850 00 | 202,850 00 |
| Hayes | 43,033.00 | 340,000 00 | 325,000 00 | 48,615 00 | 373,615 00 |
| Summerfield | 13,430.52 | 21,679 00 | 20,000 00 | 2,614 00 | 22,614 00 |
| Winterfield | 39,504.45 | 59,587 00 | 50,000 00 | 11,491 00 | 61,491 00 |
| Totals | 339,201.73 | $2,278,603 00 | $1,790,000 00 | $99,078 00 | $1,889,078 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF CLARE, }

We, W. W. Barnes, Chairman, and C. H. Sutherland, Clerk, of the Board of Supervisors of the County of Clare, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Clare aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Clerk's Office in the village of Harrison, on the 13th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 14th day of June, A. D. 1881.

{L. S.}

W. W. BARNES,
*Chairman Board of Supervisors of Clare County.*

C. H. SUTHERLAND,
*Clerk of Board of Supervisors of Clare County.*

## TABLE XVII.—CLINTON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Clinton for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Bath | 21,529.50 | $396,990 00 | $564,210 00 | $33,190 00 | $867,400 00 |
| Victor | 22,896.24 | 611,620 00 | 585,250 00 | 96,250 00 | 681,500 00 |
| Ovid | 22,416.50 | 1,263,890 00 | 1,175,240 00 | 272,360 00 | 1,447,600 00 |
| Duplain | 22,468.58 | 731,845 00 | 755,845 00 | 137,155 00 | 893,000 00 |
| DeWitt | 21,812.48 | 821,730 00 | 796,750 00 | 105,650 00 | 902,400 00 |
| Olive | 22,852.00 | 635,860 00 | 594,740 00 | 91,460 00 | 686,200 00 |
| Bingham | 23,054.69 | 1,877,180 00 | 1,410,090 00 | 563,910 00 | 1,974,000 00 |
| Greenbush | 22,259.27 | 749,300 00 | 723,580 00 | 122,420 00 | 846,000 00 |
| Watertown | 22,621.00 | 983,880 00 | 874,300 00 | 112,700 00 | 987,000 00 |
| Riley | 22,889.50 | 790,820 00 | 714,900 00 | 102,900 00 | 817,800 00 |
| Bengal | 23,175.60 | 906,000 00 | 799,387 00 | 121,813 00 | 921,200 00 |
| Essex | 22,699.50 | 852,370 00 | 929,250 00 | 123,550 00 | 1,052,800 00 |
| Eagle | 22,221.39 | 826,340 00 | 834,060 00 | 115,340 00 | 949,400 00 |
| Westphalia | 22,882.72 | 824,850 00 | 756,820 00 | 98,580 00 | 855,400 00 |
| Dallas | 22,989.91 | 1,020,280 00 | 767,600 00 | 144,200 00 | 911,800 00 |
| Lebanon | 22,467.25 | 728,640 00 | 638,780 00 | 66,220 00 | 705,000 00 |
| Totals | 361,235.53 | $14,274,095 00 | $12,941,302 00 | $2,357,198 00 | $15,298,500 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF CLINTON,

We, Levi W. Baldwin, Chairman, and John J. Keiser, Clerk, of the Board of Supervisors of the County of Clinton, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Clinton aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of St. Johns, on the 16th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this fourteenth day of July, A. D. 1881.

LEVI W. BALDWIN,
*Chairman Board of Supervisors of Clinton County.*

JOHN J. KEISER,
*Clerk of Board of Supervisors of Clinton County.*

## TABLE XVIII.—CRAWFORD COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Crawford for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| South Branch | 1,732 | $46,335 00 | $41,701 50 | $3,978 00 | $45,679 50 |
| Frederic | 41,663 | 159,900 00 | 159,900 00 | 9,782 00 | 169,682 00 |
| Grayling | 51,017 | 214,155 00 | 214,155 00 | 13,928 00 | 228,083 00 |
| Beaver Creek | 17,745 | 72,810 00 | 72,810 00 | 1,885 00 | 74,695 00 |
| Grove | 56,068 | 117,649 00 | 117,649 00 | 2,375 00 | 120,024 00 |
| Ball | 14,821 | 40,672 00 | 36,001 30 | 2,528 00 | 38,529 30 |
| Maple Forest | 49,323 | 164,995 05 | 164,995 05 | 2,260 00 | 167,255 05 |
| Center Plains | 20,414 | 70,698 00 | 70,698 00 | 11,294 00 | 81,992 00 |
| Totals | 252,783 | $887,214 05 | $877,910 35 | $48,030 00 | $925,940 35 |

STATE OF MICHIGAN, } ss.
COUNTY OF CRAWFORD, }

We, O. J. Bell, Chairman, and Wm. R. Steckert, Clerk, of the Board of Supervisors of the County of Crawford, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Crawford aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of Grayling, on the 15th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 28th day of June, A. D. 1881.

{ L. S. }

O. J. BELL,
*Chairman Board of Supervisors of Crawford County.*

WM. R. STECKERT,
*Clerk of Board of Supervisors of Crawford County.*

## TABLE XIX.—EATON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Eaton for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Bellevue | 23,028.60 | $639,520 00 | $675,644 00 | $74,356 00 | $750,000 00 |
| Benton | 21,610.00 | 641,920 00 | 605,690 00 | 90,310 00 | 696,000 00 |
| Brookfield | 22,620.00 | 422,245 00 | 397,065 00 | 58,935 00 | 456,000 00 |
| Carmel | 21,440.00 | 604,230 00 | 584,780 00 | 75,220 00 | 660,000 00 |
| Charlotte City | 2,542.66 | 725,625 00 | 713,025 00 | 282,975 00 | 996,000 00 |
| Chester | 22,723.00 | 563,995 00 | 533,625 00 | 72,375 00 | 606,000 00 |
| Delta | 21,976.41 | 640,228 00 | 618,300 00 | 41,700 00 | 660,000 00 |
| Eaton | 21,406.00 | 567,750 00 | 543,750 00 | 68,250 00 | 612,000 00 |
| Eaton Rapids | 21,000.00 | 504,560 00 | 465,640 00 | 71,360 00 | 537,000 00 |
| Eaton Rapids City | 1,262.00 | 443,865 00 | 447,063 00 | 182,937 00 | 630,000 00 |
| Hamlin | 22,241.00 | 659,180 00 | 637,825 00 | 78,575 00 | 716,400 00 |
| Kalamo | 22,983.00 | 592,715 00 | 577,170 00 | 70,830 00 | 648,000 00 |
| Oneida | 22,847.00 | 836,860 00 | 764,080 00 | 225,920 00 | 990,000 00 |
| Roxand | 22,836.00 | 452,950 00 | 423,000 00 | 81,000 00 | 504,000 00 |
| Sunfield | 21,740.00 | 435,000 00 | 443,550 00 | 48,450 00 | 492,000 00 |
| Vermontville | 22,501.51 | 728,495 00 | 618,125 00 | 119,875 00 | 738,000 00 |
| Walton | 22,612.00 | 623,910 00 | 585,740 00 | 122,260 00 | 708,000 00 |
| Windsor | 21,950.00 | 676,140 00 | 548,300 00 | 51,700 00 | 600,000 00 |
| Totals | 358,808.58 | $10,745,168 60 | $10,182,372 00 | $1,817,628 00 | $12,000,000 00 |

STATE OF MICHIGAN, }
COUNTY OF EATON, } ss.

We, Asa K. Warren, Chairman, and Garry C. Fox, Clerk, of the Board of Supervisors of the County of Eaton, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Eaton aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the city of Charlotte in the County aforesaid, on the 16th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 18th day of June, A. D. 1881.

{L. S.}

ASA K. WARREN,
*Chairman Board of Supervisors of Eaton County.*

GARRY C. FOX,
*Clerk of Board of Supervisors of Eaton County.*

## TABLE XX.—EMMET COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Emmet for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Cross Village | 19,707 | $61,653 00 | $61,653 00 | $10,695 00 | $72,248 00 |
| Little Traverse | 12,810 | 78,080 00 | 78,080 00 | 9,420 00 | 87,500 00 |
| Readmond | 22,519 | 59,585 00 | 64,585 00 | 6,120 00 | 70,705 00 |
| Friendship | 20,480 | 56,395 00 | 61,395 00 | 6,461 00 | 67,856 00 |
| Bear Creek | 20,202 | 213,527 00 | 213,527 00 | 40,583 00 | 254,110 00 |
| Bliss | 12,956 | 37,665 00 | 35,665 00 | 4,447 00 | 40,112 00 |
| Centre | 12,663 | 27,525 00 | 32,525 00 | 4,025 00 | 36,550 00 |
| Carp Lake | 26,892 | 79,912 00 | 74,912 00 | 12,050 00 | 87,962 00 |
| Pleasant View | 15,633 | 34,832 00 | 37,832 00 | 5,637 00 | 42,969 00 |
| Maple River | 19,052 | 44,783 00 | 44,783 00 | 3,148 00 | 47,931 00 |
| Littlefield | 9,800 | 24,485 00 | 24,485 00 | 3,865 00 | 28,350 00 |
| Totals | 191,714 | $718,442 00 | $728,942 00 | $107,451 00 | $836,393 00 |

STATE OF MICHIGAN, }
COUNTY OF EMMET, } ss.

We, Jesse F. Carmien, Chairman, and William R. Bowser, Clerk, of the Board of Supervisors of the County of Emmet, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Emmet aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in Harbor Springs, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 14th day of June, A. D. 1881.

JESSE F. CARMIEN,
*Chairman Board of Supervisors of Emmet County.*

WILLIAM R. BOWSER,
*Clerk of Board of Supervisors of Emmet County.*

## TABLE XXI.—GENESEE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Genesee for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Argentine | 22,777 | $804,775 00 | $804,775 00 | $61,790 00 | $866,565 00 |
| Atlas | 22,655 | 857,080 00 | 857,080 00 | 127,640 00 | 984,720 00 |
| Burton | 21,268 | 921,880 00 | 903,443 00 | 110,800 00 | 1,014,243 00 |
| Clayton | 22,434 | 637,695 00 | 634,507 00 | 68,170 00 | 702,677 00 |
| Davison | 22,704 | 670,550 00 | 650,434 00 | 86,475 00 | 736,909 00 |
| Fenton | 19,945 | 1,351,680 00 | 1,382,230 00 | 339,130 00 | 1,721,360 00 |
| Flint | 20,696 | 906,020 00 | 915,080 00 | 91,020 00 | 1,006,100 00 |
| Flushing | 22,131 | 824,710 00 | 799,969 00 | 171,610 00 | 971,579 00 |
| Forest | 22,950 | 363,145 00 | 363,145 00 | 67,450 00 | 430,595 00 |
| Gaines | 22,682 | 581,060 00 | 575,250 00 | 66,685 00 | 641,935 00 |
| Genesee | 22,365 | 830,020 00 | 830,020 00 | 117,895 00 | 947,915 00 |
| Grand Blanc | 23,118 | 1,058,285 00 | 1,047,703 00 | 110,605 00 | 1,158,308 00 |
| Mundy | 22,763 | 826,280 00 | 826,280 00 | 91,450 00 | 917,730 00 |
| Montrose | 22,850 | 300,850 00 | 276,992 00 | 40,620 00 | 317,612 00 |
| Mount Morris | 23,290 | 693,840 00 | 693,840 00 | 72,215 00 | 766,055 00 |
| Richfield | 22,625 | 643,895 00 | 631,008 00 | 107,015 00 | 738,023 00 |
| Thetford | 21,999 | 504,665 00 | 504,665 00 | 66,985 00 | 571,650 00 |
| Vienna | 22,763 | 623,390 00 | 623,390 00 | 99,700 00 | 723,090 00 |
| City of Flint— | | | | | |
| 1st Ward | ..... | 661,085 00 | 667,897 85 | 370,670 00 | 1,038,567 85 |
| 2d Ward | ..... | 1,043,906 00 | 1,054,345 06 | 319,835 00 | 1,374,180 06 |
| 3d Ward | ..... | 996,580 00 | 996,445 80 | 468,070 00 | 1,464,515 80 |
| 4th Ward | ..... | 164,800 00 | 166,448 00 | 54,650 00 | 221,098 00 |
| Totals | 402,015 | $16,056,181 00 | $16,004,947 71 | $3,110,480 00 | $19,115,427 71 |

STATE OF MICHIGAN, }
COUNTY OF GENESEE, } ss.

We, Stephen Mathewson, Chairman, and John J. Carton, Clerk, of the Board of Supervisors of the County of Genesee, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Genesee aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the city of Flint, on the 13th day of June, A. D. 1881.

{L. S.}

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 25th day of June, A. D. 1881.

STEPHEN MATHEWSON,
*Chairman Board of Supervisors of Genesee County.*

JOHN J. CARTON,
*Clerk of Board of Supervisors of Genesee County.*

## TABLE XXII.—GLADWIN COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Gladwin for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Grout | 90,120.24 | $348,175 00 | $324,000 00 | $5,755 00 | $329,755 00 |
| Billings | 58,653.48 | 174,585 00 | 174,585 00 | 4,465 00 | 179,050 00 |
| Gladwin | 157,138.47 | 489,630 00 | 550,000 00 | 290 00 | 550,290 00 |
| Totals | 305,912.19 | $1,012,390 00 | $1,048,585 00 | $10,510 00 | $1,059,095 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF GLADWIN, }

We, Manuel T. Matthews, Chairman, and Sherman S. Townsend, Clerk, of the Board of Supervisors of the County of Gladwin, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Gladwin aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Cedar, on the 13th day of June, A. D. 1881.

{ L.S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 13th day of June, A. D. 1881.

MANUEL T. MATTHEWS,
*Chairman Board of Supervisors of Gladwin County.*

S. S. TOWNSEND,
*Clerk of Board of Supervisors of Gladwin County.*

## TABLE XXIII.—GRAND TRAVERSE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Grand Traverse for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Blair | 35,784.69 | $169,765 00 | $161,765 00 | $18,500 00 | $180,265 00 |
| East Bay | 33,900.00 | 187,755 00 | 181,755 00 | 19,025 00 | 200,780 00 |
| Fife Lake | 43,341.74 | 185,735 00 | 172,460 00 | 37,540 00 | 210,000 00 |
| Grant | 22,790.00 | 147,212 00 | 182,789 00 | 17,211 00 | 200,000 00 |
| Long Lake | 17,544.11 | 116,069 00 | 101,061 00 | 39,819 00 | 140,880 00 |
| Mayfield | 23,121.00 | 110,075 00 | 125,075 00 | 13,685 00 | 138,760 00 |
| Paradise | 33,224.15 | 134,390 00 | 134,390 00 | 20,010 00 | 154,400 00 |
| Peninsula | 17,054.60 | 192,615 00 | 171,607 00 | 28,603 00 | 200,210 00 |
| Traverse | 26,298.90 | 533,360 00 | 590,085 00 | 309,915 00 | 900,000 00 |
| Whitewater | 26,539.60 | 140,190 00 | 182,090 00 | 18,490 00 | 200,580 00 |
| Totals | 279,598.79 | $1,917,168 00 | $2,003,077 00 | $522,798 00 | $2,525,875 00 |

STATE OF MICHIGAN, }
COUNTY OF GRAND TRAVERSE. } ss.

We, John Pulcipher, Chairman, and J. B. Haviland, Clerk, of the Board of Supervisors of the County of Grand Traverse, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Grand Traverse and State aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the County Seat, in the Village of Traverse City, on the fifteenth day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this eleventh day of July, A. D. 1881.

JOHN PULCIPHER,
*Chairman Board of Supervisors of Grand Traverse County.*

J. B. HAVILAND,
*Clerk of Board of Supervisors of Grand Traverse County.*

## TABLE XXIV.—GRATIOT COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Gratiot for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Elba | 21,629.00 | $185,125 00 | $92,225 00 | $17,775 00 | $110,000 00 |
| Hamilton | 21,082.00 | 170,900 00 | 73,004 00 | 36,996 00 | 110,000 00 |
| Lafayette | 22,618.00 | 174,655 00 | 125,930 00 | 28,070 00 | 154,000 00 |
| Wheeler | 22,626.00 | 210,015 00 | 100,880 00 | 34,120 00 | 135,000 00 |
| Washington | 22,335.00 | 367,985 00 | 146,260 00 | 37,740 00 | 184,000 00 |
| North Star | 21,710.00 | 354,270 00 | 222,040 00 | 52,960 00 | 275,000 00 |
| Emerson | 22,395.00 | 308,460 00 | 153,843 00 | 31,157 00 | 185,000 00 |
| Bethany | 22,515.00 | 436,440 00 | 161,550 00 | 48,450 00 | 210,000 00 |
| Fulton | 22,582.00 | 471,280 00 | 228,865 00 | 66,135 00 | 295,000 00 |
| Newark | 21,959.00 | 611,022 00 | 175,028 00 | 74,972 00 | 250,000 00 |
| Arcada | 21,087.00 | 598,505 00 | 170,140 00 | 69,860 00 | 240,000 00 |
| Pine River | 22,440.00 | 801,680 00 | 296,720 00 | 131,280 00 | 428,000 00 |
| North Shade | 22,428.00 | 366,945 00 | 186,085 00 | 38,915 00 | 225,000 00 |
| New Haven | 22,712.00 | 316,380 00 | 145,435 00 | 34,565 00 | 180,000 00 |
| Sumner | 22,441.00 | 361,615 00 | 163,200 00 | 51,800 00 | 215,000 00 |
| Seville | 22,498.00 | 281,479 00 | 150,600 00 | 28,400 00 | 179,000 00 |
| Ithaca | 2,550.00 | 221,075 00 | 19,105 00 | 105,895 00 | 125,000 00 |
| Totals | 357,607.00 | $6,237,831 00 | $2,610,910 00 | $889,090 00 | $3,500,000 00 |

STATE OF MICHIGAN, }
COUNTY OF GRATIOT, } ss.

We, E. W. Kellogg, Chairman, and J. M. Trask, Clerk of the Board of Supervisors of the County of Gratiot, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Gratiot aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at Ithaca, on the 15th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this fourteenth day of July, A. D. 1881.

{ L. S. }

E. W. KELLOGG,
*Chairman Board of Supervisors of Gratiot County.*

J. M. TRASK,
*Clerk of Board of Supervisors of Gratiot County.*

## TABLE XXV.—HILLSDALE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Hillsdale for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Adams | 23,907.00 | $997,010 00 | $974,010 00 | $138,780 00 | $1,112,790 00 |
| Allen | 22,800.00 | 815,470 00 | 908,470 00 | 109,460 00 | 1,017,930 00 |
| Amboy | 19,250.00 | 422,650 00 | 415,650 00 | 44,150 00 | 459,800 00 |
| Camden | 26,767.00 | 657,005 00 | 690,905 00 | 52,780 00 | 743,685 00 |
| Cambria | 21,600.00 | 907,035 00 | 883,035 00 | 132,160 00 | 1,015,195 00 |
| Fayette | 14,000.00 | 1,062,525 00 | 1,076,525 00 | 313,390 00 | 1,389,915 00 |
| Hillsdale | 8,524.00 | 366,885 00 | 376,600 00 | 42,284 00 | 418,884 00 |
| Jefferson | 22,729.00 | 717,180 00 | 706,180 00 | 79,400 00 | 785,580 00 |
| Litchfield | 22,580.00 | 1,012,010 00 | 1,012,010 00 | 157,080 00 | 1,169,090 00 |
| Moscow | 22,640.00 | 796,590 00 | 785,590 00 | 111,840 00 | 897,430 00 |
| Pittsford | 22,538.00 | 932,250 00 | 932,250 00 | 145,480 00 | 1,077,730 00 |
| Reading | 20,184.00 | 1,034,780 00 | 1,034,780 00 | 247,020 00 | 1,281,800 00 |
| Ransom | 19,185.00 | 571,530 00 | 530,530 00 | 84,620 00 | 615,150 00 |
| Somerset | 22,443.00 | 675,970 00 | 675,970 00 | 71,330 00 | 747,300 00 |
| Scipio | 18,434.00 | 615,290 00 | 626,290 00 | 66,160 00 | 692,450 00 |
| Wheatland | 22,722.00 | 982,575 00 | 956,575 00 | 111,320 00 | 1,067,895 00 |
| Woodbridge | 19,185.00 | 518,970 00 | 530,970 00 | 48,270 00 | 579,240 00 |
| Wright | 27,423.00 | 731,665 00 | 694,665 00 | 93,925 00 | 788,590 00 |
| Hillsdale City— | | | | | |
| 1st and 2d Wards | ---------- | 496,410 00 | 530,410 00 | 275,470 00 | 805,880 00 |
| 3d and 4th Wards | ---------- | 814,900 00 | 877,900 00 | 469,000 00 | 1,346,900 00 |
| Totals | 375,911.00 | $15,118,700 00 | $15,219,315 00 | $2,793,919 00 | $18,013,234 00 |

STATE OF MICHIGAN, }
COUNTY OF HILLSDALE, } ss.

We, Peter Hewitt, Chairman, and Corvis M. Barre, Clerk, of the Board of Supervisors of the County of Hillsdale, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Hillsdale aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the City of Hillsdale, on the 13th day of June, A. D. 1881.

{ L. S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 21st day of July, A. D. 1881.

PETER HEWITT,
*Chairman Board of Supervisors of Hillsdale County.*

CORVIS M. BARRE,
*Clerk of Board of Supervisors of Hillsdale County.*

## TABLE XXVI.—HOUGHTON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Houghton for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Adams | 64,322.25 | $191,974 00 | $191,974 00 | $5,550 00 | $197,524 00 |
| Calumet | 22,195.00 | 293,105 00 | 293,105 00 | 63,750 00 | 356,855 00 |
| Franklin | 10,853.49 | 257,090 00 | 257,090 00 | 25,235 00 | 282,325 00 |
| Hancock | 51,423.00 | 212,105 00 | 212,105 00 | 40,200 00 | 252,305 00 |
| Portage | 139,499.00 | 268,580 00 | 268,580 00 | 24,425 00 | 293,005 00 |
| Quincy | 1,120.00 | 14,760 00 | 14,760 00 | 14,200 00 | 28,960 00 |
| Schoolcraft | 72,256.00 | 187,554 00 | 187,554 00 | 11,000 00 | 198,554 00 |
| Totals | 411,710.75 | $1,435,229 00 | $1,435,229 00 | $184,360 00 | $1,619,589 00 |

STATE OF MICHIGAN, }
COUNTY OF HOUGHTON, } ss.

We, John Duncan, Chairman, and Thos. D. Meads, Clerk of the Board of Supervisors of the County of Houghton, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Houghton aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of Houghton, on the thirteenth day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 24th day of June, A. D. 1881.

JOHN DUNCAN,
*Chairman Board of Supervisors of Houghton County.*

THOS. D. MEADS,
*Clerk of Board of Supervisors of Houghton County.*

## TABLE XXVII.—HURON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Huron for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Bingham | 22,520.00 | $171,460 00 | $171,460 00 | $11,540 00 | $183,000 00 |
| Bloomfield | 21,530.28 | 150,686 00 | 140,686 00 | 8,519 00 | 149,205 00 |
| Brookfield | 21,991.00 | 115,645 00 | 110,645 00 | 4,140 00 | 114,785 00 |
| Caseville | 20,163.00 | 256,225 00 | 256,225 00 | 90,215 00 | 346,440 00 |
| Chandler | 22,520.47 | 134,957 00 | 139,957 00 | 8,651 00 | 148,608 00 |
| Colfax | 21,206.00 | 119,457 00 | 114,457 00 | 5,363 00 | 119,820 00 |
| Dwight | 22,569.00 | 164,350 00 | 164,350 00 | 15,374 00 | 179,724 00 |
| Fair Haven | 12,596.00 | 68,792 00 | 68,792 00 | 12,449 00 | 81,241 00 |
| Gore | 4,182.66 | 35,060 00 | 35,060 00 | 6,165 00 | 41,225 00 |
| Grant | 22,740.30 | 116,710 00 | 116,710 00 | 10,765 00 | 127,475 00 |
| Hume | 18,885.85 | 160,758 00 | 170,758 00 | 47,075 00 | 217,833 00 |
| Huron | 22,789.92 | 196,265 00 | 212,265 00 | 20,698 00 | 232,963 00 |
| Lake | 10,410.00 | 69,575 00 | 60,575 00 | 6,871 00 | 67,446 00 |
| Lincoln | 21,876.00 | 76,485 00 | 101,485 00 | 5,613 00 | 107,098 00 |
| Meade | 20,151.00 | 93,920 00 | 118,920 00 | 16,900 00 | 135,820 00 |
| Oliver | 19,454.00 | 80,451 00 | 80,451 00 | 2,388 00 | 82,839 60 |
| Paris | 22,868.00 | 164,327 00 | 164,327 00 | 25,935 00 | 190,262 60 |
| Port Austin | 9,306.00 | 273,920 00 | 273,920 00 | 71,690 00 | 345,610 00 |
| Rubicon | 14,482.00 | 175,761 00 | 175,761 00 | 39,270 00 | 215,031 00 |
| Sand Beach | 23,543.27 | 274,679 00 | 284,679 00 | 54,528 00 | 339,207 00 |
| Sebewaing | 20,242.00 | 352,956 00 | 352,956 00 | 73,151 00 | 426,107 00 |
| Sherman | 22,112.00 | 162,713 00 | 156,713 00 | 22,025 00 | 178,738 00 |
| Sheridan | 21,880.00 | 120,030 00 | 125,030 00 | 8,700 00 | 133,730 00 |
| Sigel | 20,907.00 | 91,250 00 | 95,250 00 | 7,497 00 | 102,747 00 |
| Verona | 22,960.00 | 157,010 00 | 157,010 00 | 15,020 00 | 172,030 00 |
| White Rock | 5,344.36 | 56,350 00 | 66,350 00 | 10,923 00 | 77,273 00 |
| Winsor | 21,661.00 | 110,890 00 | 135,890 00 | 9,935 00 | 145,825 00 |
| Totals | 510,891.11 | $3,950,682 00 | $4,050,682 00 | $611,300 00 | $4,661,982 00 |

STATE OF MICHIGAN, }
COUNTY OF HURON, } ss.

We, R. W. Irwin, Chairman, and John M. Cary, Clerk, of the Board of Supervisors of the County of Huron, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Huron aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Bad Axe, on the 17th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 17th day of June, A. D. 1881.

R. W. IRWIN,
*Chairman Board of Supervisors of Huron County.*

JOHN M. CARY,
*Clerk of Board of Supervisors of Huron County.*

## TABLE XXVIII.—INGHAM COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Ingham for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Alaiedon | 21,668.00 | $666,510 00 | $437,190 00 | $82,810 00 | $520,000 00 |
| Aurelius | 22,290.00 | 680,670 00 | 479,680 00 | 70,320 00 | 550,000 00 |
| Bunkerhill | 21,018.10 | 512,000 00 | 290,500 00 | 84,500 00 | 375,000 00 |
| Delhi | 22,789.00 | 577,155 00 | 442,159 00 | 87,841 00 | 530,000 00 |
| Ingham | 20,974.00 | 718,090 00 | 434,036 00 | 145,964 00 | 580,000 00 |
| Lansing | 17,840.00 | 605,127 00 | 435,215 00 | 44,785 00 | 480,000 00 |
| Leroy | 21,472.22 | 500,610 00 | 328,160 00 | 96,840 00 | 425,000 00 |
| Leslie | 22,769.00 | 1,013,710 00 | 528,470 00 | 201,530 00 | 730,000 00 |
| Locke | 22,999.00 | 405,870 00 | 374,960 00 | 50,040 00 | 425,000 00 |
| Meridian | 21,768.00 | 536,425 00 | 466,600 00 | 53,400 00 | 520,000 00 |
| Onondaga | 22,886.50 | 585,790 00 | 514,980 00 | 65,020 00 | 580,000 00 |
| Stockbridge | 22,415.00 | 552,300 00 | 280,000 00 | 120,000 00 | 400,000 00 |
| Vevay | 20,490.00 | 654,960 00 | 444,850 00 | 105,150 00 | 550,000 00 |
| Wheatfield | 19,675.00 | 590,950 00 | 376,300 00 | 103,700 00 | 480,000 00 |
| White Oak | 22,769.75 | 357,110 00 | 340,300 00 | 49,700 00 | 390,000 00 |
| Williamston | 18,800.00 | 517,291 00 | 472,780 00 | 107,220 00 | 580,000 00 |
| Lansing City— | | | | | |
| 1st Ward | ..... | 367,680 00 | 185,610 00 | 77,390 00 | 263,000 00 |
| 2d Ward | ..... | 1,124,900 00 | 494,530 00 | 417,850 00 | 912,380 00 |
| 3d Ward | ..... | 411,540 00 | 190,710 00 | 133,060 00 | 323,770 00 |
| 4th Ward | ..... | 538,650 00 | 257,150 00 | 116,000 00 | 373,150 00 |
| 5th Ward | ..... | 427,930 00 | 237,050 00 | 37,850 00 | 274,900 00 |
| 6th Ward | ..... | 325,200 00 | 159,190 00 | 70,810 00 | 230,000 00 |
| Mason City— | | | | | |
| 1st Ward | 720.00 | 289,950 00 | 82,550 00 | 137,450 00 | 220,000 00 |
| 2d Ward | ..... | 301,620 00 | 97,950 00 | 132,050 00 | 230,000 00 |
| Totals | 343,333.57 | $13,253,038 60 | $8,250,920 00 | $2,591,280 00 | $10,942,200 00 |

STATE OF MICHIGAN, }
COUNTY OF INGHAM, } ss.

We, John S. Huston, Chairman, and J. T. Campbell, Clerk of the Board of Supervisors of the County of Ingham, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Ingham aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the City of Mason on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, we have hereunto subscribed our names, and affixed the Seal of said County, this first day of July, A. D. 1881.

JOHN S. HUSTON,
*Chairman Board of Supervisors of Ingham County.*

J. T. CAMPBELL,
*Clerk of Board of Supervisors of Ingham County.*

## TABLE XXIX.—IONIA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Ionia for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Danby | 22,466.23 | $315,590 00 | $510,940 00 | $85,810 00 | $596,750 00 |
| Portland | 22,267.00 | 1,009,280 00 | 989,095 00 | 172,490 00 | 1,161,585 00 |
| Lyons | 21,921.74 | 893,270 00 | 1,009,395 00 | 178,010 00 | 1,187,405 00 |
| North Plains | 22,826.00 | 841,463 00 | 849,877 00 | 127,438 00 | 977,315 00 |
| Ronald | 22.776.00 | 822,710 00 | 798,029 00 | 186,123 00 | 984,152 00 |
| Ionia | 21,917.86 | 842,160 00 | 825,317 00 | 122,110 00 | 947,427 00 |
| Ionia City— | | | | | |
| 1st and 2d Wards | ---------- | 834,785 00 | 760,915 00 | 230,047 00 | 990,962 00 |
| 3d and 4th Wards | ---------- | 530,345 00 | 456,097 00 | 96,200 00 | 552,297 00 |
| Orange | 23,310.00 | 647,130 00 | 724,785 00 | 71,835 00 | 796,620 00 |
| Sebewa | 23,680.75 | 436,060 00 | 453,502 00 | 63,685 00 | 517,187 00 |
| Odessa | 22,542.00 | 403,300 00 | 391,201 00 | 69,280 00 | 460,481 00 |
| Berlin | 26,635.00 | 916,120 00 | 824,508 00 | 125,070 00 | 949,578 00 |
| Easton | 18,764.21 | 738,245 00 | 649,656 00 | 162,120 00 | 811,776 00 |
| Orleans | 22,614.51 | 669,490 00 | 656,101 00 | 96,990 00 | 753,091 00 |
| Otisco | 22,213.06 | 848,010 00 | 839,530 00 | 152,840 00 | 992,370 00 |
| Keene | 22,623.00 | 704,285 00 | 739,499 00 | 70,440 00 | 809,939 00 |
| Boston | 22,067.06 | 910,570 00 | 719,350 60 | 178,010 00 | 897,360 00 |
| Campbell | 22,974.77 | 493,200 00 | 458,676 00 | 85,780 00 | 544,456 00 |
| Totals | 361,504.23 | $13,206,013 00 | $12,656,473 00 | $2,274,278 00 | $14,930,751 00 |

STATE OF MICHIGAN, }
COUNTY OF IONIA, } ss.

We, Chauncey Waterbury, Chairman, and Henry P. Taylor, Clerk, of the Board of Supervisors of the County of Ionia, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Ionia aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the City of Ionia, on the 17th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this seventh day of July, A. D. 1881.

{L. S.}

C. WATERBURY,
*Chairman Board of Supervisors of Ionia County.*

HENRY P. TAYLOR,
*Clerk of Board of Supervisors of Ionia County.*

## TABLE XXX.—IOSCO COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Iosco for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Alabaster | 17,629.00 | $75,403 00 | $76,835 00 | $5,165 00 | $82,000 00 |
| AuSable | 7,314.51 | 118,061 00 | 125,155 00 | 9,845 00 | 135,000 00 |
| Baldwin | 14,004.31 | 117,018 59 | 161,600 00 | 13,400 00 | 175,000 00 |
| Burleigh | 22,115.00 | 55,549 00 | 55,655 00 | 1,345 00 | 57,000 00 |
| Grant | 42,522.97 | 84,850 00 | 98,875 00 | 1,125 00 | 100,000 00 |
| Oscoda | 34,814.16 | 280,163 00 | 269,700 00 | 30,300 00 | 300,000 00 |
| Plainfield | 26,076.71 | 64,224 00 | 68,660 00 | 1,340 00 | 70,000 00 |
| Sherman | 19,622.72 | 54,154 00 | 54,325 00 | 3,675 00 | 58,000 00 |
| Tawas | 18,545.71 | 111,155 00 | 118,200 00 | 11,800 00 | 130,000 00 |
| Thompson | 19,170.04 | 33,340 00 | 34,500 00 | 500 00 | 35,000 00 |
| Wilber | 24,955.84 | 26,200 00 | 16,820 00 | 3,180 00 | 20,000 00 |
| Totals | 245,870.47 | $1,021,116 59 | $1,080,325 00 | $81,675 00 | $1,162,000 00 |

STATE OF MICHIGAN, }
COUNTY OF IOSCO, } ss.

We, Benjamin Richards, Chairman, and Hiram E. Hoard, Clerk, of the Board of Supervisors of the County of Iosco, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Iosco aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the Village of Tawas City, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 15th day of June, A. D. 1881.

BENJAMIN RICHARDS,
*Chairman Board of Supervisors of Iosco County.*

HIRAM E. HOARD,
*Clerk of Board of Supervisors of Iosco County.*

## TABLE XXXI.—ISABELLA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Isabella for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Coe | 22,656.00 | $358,820 00 | $321,810 00 | $42,190 00 | $364,000 00 |
| Lincoln | 23,102.00 | 303,275 00 | 271,552 00 | 22,448 00 | 294,000 00 |
| Fremont | 22,810.00 | 201,930 00 | 173,910 00 | 16,090 00 | 190,000 00 |
| Rolland | 22,961.00 | 166,716 00 | 121,836 00 | 39,664 00 | 161,000 00 |
| Broomfield | 22,915.83 | 178,200 00 | 122,064 00 | 7,936 00 | 130,000 00 |
| Deerfield | 20,760.00 | 159,87[illegible] 00 | 124,317 00 | 5,683 00 | 130,000 00 |
| Union | 22,650.00 | 696,208 00 | 488,691 00 | 156,309 00 | 645,000 00 |
| Chippewa | 22,760.00 | 182,365 00 | 153,805 00 | 16,195 00 | 170,000 00 |
| Denver | 21,440 00 | 90,228 00 | 94,842 00 | 4,158 00 | 99,000 00 |
| Isabella | 21,385.92 | 167,620 00 | 164,210 00 | 15,790 00 | 180,000 00 |
| Nottawa | 20,061.00 | 106,435 00 | 134,040 00 | 5,960 00 | 140,000 00 |
| Sherman | 22,714.94 | 108,425 00 | 87,050 00 | 2,950 00 | 90,000 00 |
| Coldwater | 22,683.27 | 124,110 00 | 113,549 00 | 6,451 00 | 120,000 00 |
| Gilmore | 22,237.94 | 147,755 00 | 112,960 00 | 7,040 00 | 120,000 00 |
| Vernon | 22,724.93 | 176,934 00 | 139,829 00 | 25,171 00 | 165,000 00 |
| Wise | 20,223.97 | 120,630 00 | 73,822 00 | 28,178 00 | 102,000 00 |
| Totals | 354,086.79 | $3,289,523 00 | $2,697,787 00 | $402,213 00 | $3,100,000 00 |

STATE OF MICHIGAN, }
COUNTY OF ISABELLA, } ss.

We, Daniel Doxsie, Chairman, and L. C. Griffith, Clerk, of the Board of Supervisors of the County of Isabella, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Isabella aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Mt. Pleasant, on the eighteenth day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this fifth day of July, A. D. 1881.

{L. S.}

DANIEL DOXSIE,
*Chairman Board of Supervisors of Isabella County.*

L. C. GRIFFITH,
*Clerk of Board of Supervisors of Isabella County.*

## TABLE XXXII.—JACKSON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Jackson for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed | As Equalized. | | |
| Blackman | 19,260.00 | $343,810 00 | $319,970 00 | $35,140 00 | $355,110 00 |
| Columbia | 23,857.00 | 363,245 00 | 336,129 00 | 70,370 00 | 406,499 00 |
| Concord | 23,230.60 | 392,835 00 | 343,782 00 | 80,105 00 | 422,887 00 |
| Grass Lake | 29,254.00 | 402,080 00 | 475,316 00 | 80,010 00 | 555,326 00 |
| Hanover | 22,374.00 | 320,340 00 | 318,959 00 | 50,380 00 | 369,339 00 |
| Henrietta | 22,000.00 | 209,670 00 | 215,320 00 | 35,180 00 | 250,500 00 |
| Leoni | 29,175.00 | 311,820 00 | 312,981 00 | 53,310 00 | 366,291 00 |
| Liberty | 22,875.00 | 255,870 00 | 243,557 00 | 33,140 00 | 276,697 00 |
| Napoleon | 17,454.00 | 294,100 00 | 244,163 00 | 39,432 00 | 283,595 00 |
| Norvell | 19,460.00 | 225,310 00 | 234,495 00 | 43,200 00 | 277,695 00 |
| Parma | 22,319.00 | 319,070 00 | 331,988 00 | 45,027 00 | 377,015 00 |
| Pulaski | 22,405.00 | 316,030 00 | 288,740 00 | 42,179 00 | 330,919 00 |
| Rives | 22,133.00 | 220,380 00 | 270,540 00 | 28,880 00 | 299,420 00 |
| Sandstone | 22,503.00 | 316,540 00 | 311,383 00 | 35,550 00 | 346,933 00 |
| Springport | 22,300.00 | 312,950 00 | 266,475 00 | 54,680 00 | 321,155 00 |
| Summit | 19,219.00 | 297,325 00 | 289,182 00 | 42,795 00 | 331,977 00 |
| Spring Arbor | 22,348.00 | 392,080 00 | 326,440 00 | 44,480 00 | 370,920 00 |
| Tompkins | 22,630.00 | 287,475 00 | 237,746 00 | 28,400 00 | 266,146 00 |
| Waterloo | 23,265.00 | 268,650 00 | 253,812 00 | 39,680 00 | 293,492 00 |
| City of Jackson— | | | | | |
| 1st Ward | ---------- | 293,650 00 | 388,735 00 | 67,700 00 | 456,435 00 |
| 2d Ward | ---------- | 223,250 00 | 310,142 00 | 72,950 00 | 383,092 00 |
| 3d Ward | ---------- | 119,420 00 | 159,125 00 | 7,700 00 | 166,825 00 |
| 4th Ward | ---------- | 379,120 00 | 508,147 00 | 63,650 00 | 571,797 00 |
| 5th Ward | ---------- | 259,650 00 | 342,349 00 | 22,300 00 | 364,649 00 |
| 6th Ward | ---------- | 194,025 00 | 256,943 00 | 12,050 00 | 268,993 00 |
| 7th Ward | ---------- | 264,150 00 | 347,067 00 | 17,550 00 | 364,617 00 |
| 8th Ward | ---------- | 81,625 00 | 120,877 00 | 55,100 00 | 175,977 00 |
| Totals | 431,641.60 | $7,671,510 00 | $8,054,363 00 | $1,200,938 00 | $9,255,301 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF JACKSON, }

We, Joseph M. Griswold, Chairman, and W. H. Van Horn, Clerk, of the Board of Supervisors of the County of Jackson, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Jackson aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the City of Jackson, on the 16th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 21st day of July, A. D. 1881.

{L. S.}

JOSEPH M. GRISWOLD,
*Chairman Board of Supervisors of Jackson County.*

W. H. VAN HORN,
*Clerk of Board of Supervisors of Jackson County.*

## TABLE XXXIII.—KALAMAZOO COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Kalamazoo for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Alamo | 22,981 | $497,475 00 | $512,399 00 | $64,510 00 | $576,909 00 |
| Brady | 21,733 | 609,270 00 | 621,455 00 | 93,725 00 | 715,180 00 |
| Charleston | 22,277 | 719,910 00 | 755,505 00 | 108,390 00 | 864,295 00 |
| Climax | 22,858 | 712,625 00 | 712,625 00 | 97,285 00 | 809,910 00 |
| Comstock | 22,325 | 1,021,140 00 | 1,021,140 00 | 157,910 00 | 1,179,050 00 |
| Cooper | 22,769 | 765,430 00 | 750,122 00 | 113,390 00 | 863,512 00 |
| Kalamazoo | 19,170 | 4,637,975 00 | 4,637,975 00 | 1,448,440 00 | 6,086,415 00 |
| Oshtemo | 22,939 | 832,010 00 | 815,370 00 | 97,070 00 | 912,440 00 |
| Portage | 20,823 | 711,490 00 | 711,490 00 | 99,220 00 | 810,710 00 |
| Pavilion | 21,883 | 577,260 00 | 594,577 00 | 101,870 00 | 696,447 00 |
| Prairie Ronde | 22,977 | 703,510 00 | 773,861 00 | 51,920 00 | 825,781 00 |
| Richland | 21,570 | 911,525 00 | 902,410 00 | 207,720 00 | 1,110,130 00 |
| Ross | 20,594 | 671,370 00 | 711,970 00 | 193,790 00 | 905,760 00 |
| Schoolcraft | 21,668 | 1,163,910 00 | 1,140,632 00 | 226,390 00 | 1,367,022 00 |
| Texas | 22,215 | 647,640 00 | 660,592 00 | 58,210 00 | 718,802 00 |
| Wakeshma | 21,011 | 547,300 00 | 591,624 00 | 50,550 00 | 642,174 00 |
| Totals | 349,793 | $15,730,640 00 | $15,914,147 00 | $3,170,390 00 | $19,084,537 00 |

STATE OF MICHIGAN, }
COUNTY OF KALAMAZOO, } ss.

We, B. Snow, Chairman, and Theron F. Giddings, Clerk, of the Board of Supervisors of the County of Kalamazoo, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Kalamazoo aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of Kalamazoo, on the 17th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 17th day of June, A. D. 1881.

B. SNOW,
*Chairman Board of Supervisors of Kalamazoo County.*

THERON F. GIDDINGS,
*Clerk of Board of Supervisors of Kalamazoo County.*

## TABLE XXXIV.—KALKASKA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Kalkaska for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Boardman | 21,937.81 | $141,270 00 | $120,466 00 | $9,534 00 | $130,000 00 |
| Clearwater | 59,598.00 | 298,540 00 | 293,400 00 | 6,600 00 | 300,000 00 |
| Cold Springs | 20,554.47 | 111,819 45 | 108,090 00 | 5,533 00 | 113,623 00 |
| Excelsior | 21,032.62 | 115,723 01 | 106,812 84 | 18,187 16 | 125,000 00 |
| Garfield | 20,766.47 | 143,633 50 | 138,633 50 | 15,456 50 | 154,090 00 |
| Kalkaska | 21,285.00 | 188,446 00 | 203,446 00 | 35,780 00 | 239,226 00 |
| Orange | 21,327.00 | 108,898 00 | 108,898 00 | 6,443 00 | 115,341 00 |
| Oliver | 18,778.62 | 96,460 00 | 109,425 00 | 575 00 | 110,000 00 |
| Rapid River | 41,201.70 | 247,404 00 | 247,404 00 | 7,150 00 | 254,554 00 |
| Springfield | 62,605.83 | 809,025 00 | 823,829 00 | 5,043 00 | 828,872 00 |
| Wilson | 21,618.00 | 101,140 00 | 106,261 00 | 3,340 00 | 109,601 00 |
| Totals | 330,705.52 | $2,362,349 96 | $2,366,665 34 | $113,641 66 | $2,480,307 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF KALKASKA, }

We, W. H. Leach, Chairman, and C. V. Selkirk, Clerk of the Board of Supervisors of the County of Kalkaska, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Kalkaska aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the village of Kalkaska, in the county of Kalkaska, on the 13th day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this thirteenth day of June, A. D. 1881.

W. H. LEACH,
*Chairman Board of Supervisors of Kalkaska County.*

C. V. SELKIRK,
*Clerk of Board of Supervisors of Kalkaska County.*

## TABLE XXXV.—KENT COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Kent for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Ada | 22,546 | $311,650 00 | $297,000 00 | $43,230 00 | $340,230 00 |
| Algoma | 22,493 | 241,465 00 | 210,490 00 | 39,510 00 | 250,000 00 |
| Alpine | 22,925 | 410,280 00 | 397,280 00 | 40,470 00 | 437,750 00 |
| Bowne | 22,921 | 273,732 00 | 262,477 00 | 36,523 00 | 299,000 00 |
| Byron | 22,469 | 281,850 00 | 248,850 00 | 34,990 00 | 283,840 00 |
| Caledonia | 21,963 | 292,270 00 | 287,270 00 | 41,200 00 | 328,470 00 |
| Cannon | 20,841 | 351,165 00 | 299,835 00 | 46,165 00 | 346,000 00 |
| Cascade | 21,682 | 362,335 00 | 289,335 00 | 36,290 00 | 325,625 00 |
| Courtland | 22,954 | 293,345 00 | 275,375 00 | 35,325 00 | 310,700 00 |
| Gaines | 22,108 | 359,134 00 | 324,134 00 | 39,985 00 | 364,119 00 |
| Grand Rapids | 19,978 | 730,760 00 | 638,380 00 | 50,620 00 | 689,000 00 |
| Grattan | 22,377 | 319,710 00 | 298,110 00 | 51,890 00 | 350,000 00 |
| Lowell | 20,932 | 478,355 00 | 498,855 00 | 89,241 00 | 588,096 00 |
| Nelson | 22,023 | 179,460 00 | 171,775 00 | 36,725 00 | 208,500 00 |
| Oakfield | 21,761 | 265,825 00 | 261,335 00 | 28,665 00 | 290,000 00 |
| Paris | 22,303 | 592,800 00 | 557,220 00 | 67,780 00 | 625,000 00 |
| Plainfield | 22,912 | 340,505 00 | 309,790 00 | 32,210 00 | 342,000 00 |
| Solon | 22,828 | 149,505 00 | 164,875 00 | 30,125 00 | 195,000 00 |
| Sparta | 22,833 | 373,720 00 | 331,815 00 | 82,185 00 | 414,000 00 |
| Spencer | 22,089 | 103,445 00 | 100,396 00 | 17,604 00 | 118,000 00 |
| Tyrone | 22,494 | 136,065 00 | 129,425 00 | 14,075 00 | 143,500 00 |
| Vergennes | 22,115 | 408,195 00 | 327,710 00 | 36,290 00 | 364,000 00 |
| Walker | 21,000 | 428,835 00 | 466,335 00 | 61,635 00 | 527,970 00 |
| Wyoming | 19,650 | 351,894 00 | 388,945 00 | 26,215 00 | 415,160 00 |
| City of Grand Rapids | 4,698 | 7,267,768 00 | 7,763,314 00 | 1,693,936 00 | 9,457,250 00 |
| Totals | 532,885 | $15,303,368 00 | $15,300,326 00 | $2,712,884 00 | $18,013,210 00 |

STATE OF MICHIGAN, }
COUNTY OF KENT, } ss.

We, Edgar R. Johnson, Chairman, and Fred S. Clark, Clerk, of the Board of Supervisors of the County of Kent, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Kent aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the City of Grand Rapids in the County of Kent, on the 24th day of June, A. D. 1881.

{ L. S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this twenty-fifth day of June, A, D. 1881.

E. R. JOHNSON,
*Chairman Board of Supervisors of Kent County.*

FRED S. CLARK,
*Clerk of Board of Supervisors of Kent County.*

## TABLE XXXVI.—KEWEENAW COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Keweenaw for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Allouez | 16,820.00 | $50,475 00 | $50,185 00 | $23,575 00 | $73,760 00 |
| Clifton | 15,689.60 | 46,276 93 | 60,831 93 | 6,664 00 | 67,495 93 |
| Houghton | 26,555.79 | 82,070 00 | 88,605 00 | 25,645 00 | 114,250 00 |
| Sherman | 38,111.93 | 20,248 00 | 16,680 00 | 36,375 00 | 53,055 00 |
| Eagle Harbor | 18,661.33 | 73,535 20 | 71,035 20 | 33,400 00 | 104,435 20 |
| Grant | 38,082.55 | 76,425 00 | 89,125 00 | 25,325 00 | 114,450 00 |
| Copper Harbor | 49,649.03 | 117,324 00 | 208,828 00 | 1,925 00 | 210,753 00 |
| Totals | 208,570.23 | $466,354 13 | $585,290 13 | $152,909 00 | $738,199 13 |

STATE OF MICHIGAN, }
COUNTY OF KEWEENAW, } ss.

We, B. F. Emerson, Chairman, and John Twohy, Jr., Clerk, of the Board of Supervisors of the County of Keweenaw, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Keweenaw aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the County Clerk's Office in the village of Eagle River, on the fifteenth day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this nineteenth day of July, A. D. 1881.

{L. S.}

B. F. EMERSON,
*Chairman Board of Supervisors of Keweenaw County.*

JOHN TWOHY, JR.,
*Clerk of Board of Supervisors of Keweenaw County.*

## TABLE XXXVII.—LAKE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Lake for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Chase | 22,293.55 | $171,525 00 | $146,805 00 | $83,630 00 | $230,435 00 |
| Pinora | 21,278.81 | 151,685 00 | 145,185 00 | 30,795 00 | 175,980 00 |
| Ellsworth | 44,651.69 | 300,006 00 | 254,256 00 | 9,345 00 | 263,601 00 |
| Dover | 23,442.95 | 108,766 00 | 108,766 00 | 4,380 00 | 113,146 00 |
| Glencoe | 21,060.23 | 47,976 00 | 58,336 00 | 1,360 00 | 59,696 00 |
| Cherry Valley | 22,287.99 | 98,900 00 | 98,900 00 | 5,500 00 | 104,400 00 |
| Yates | 21,100.55 | 142,455 00 | 110,455 00 | 5,860 00 | 116,315 00 |
| Pleasant Plains | 21,773.35 | 69,700 00 | 69,700 00 | 11,440 00 | 81,140 00 |
| Webber | 21,521.31 | 67,359 00 | 67,359 00 | 3,592 00 | 70,951 00 |
| Eden | 40,812.57 | 118,040 00 | 128,290 00 | 5,555 00 | 133,845 00 |
| Elk | 62,613.41 | 356,213 00 | 349,733 00 | 4,900 00 | 354,633 00 |
| Lake | 21,412.62 | 116,970 00 | 116,970 00 | 5,090 00 | 122,060 00 |
| Total18 | 344,249.03 | $1,749,595 00 | $1,654,755 00 | $171,447 00 | $1,826,202 00 |

STATE OF MICHIGAN, }
COUNTY OF LAKE, } ss.

We, John J. Robertson, Chairman, and Ralph H. Hollister, Clerk of the Board of Supervisors of the County of Lake, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Lake aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House, in the village of Baldwin, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 9th day of July, A. D. 1881.

JOHN J. ROBERTSON,
*Chairman Board of Supervisors of Lake County.*

RALPH H. HOLLISTER,
*Clerk of Board of Supervisors of Lake County.*

## TABLE XXXVIII.—LAPEER COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Lapeer for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Almont | 23,010 | $1,137,040 00 | $1,102,340 00 | $367,660 00 | $1,470,000 00 |
| Attica | 23,055 | 522,620 00 | 519,370 00 | 70,630 00 | 590,000 00 |
| Arcadia | 23,000 | 229,380 00 | 334,420 00 | 40,580 00 | 375,000 00 |
| Burnside | 33,972 | 445,500 00 | 442,970 00 | 67,030 00 | 510,000 00 |
| Burlington | 20,976 | 371,010 00 | 354,735 00 | 45,265 00 | 400,000 00 |
| Dryden | 22,447 | 856,880 00 | 844,945 00 | 125,055 00 | 970,000 00 |
| Deerfield | 23,077 | 265,600 00 | 266,010 00 | 23,990 00 | 290,000 00 |
| Elba | 21,579 | 586,460 00 | 557,010 00 | 52,990 00 | 610,000 00 |
| Goodland | 22,640 | 250,325 00 | 303,910 00 | 36,090 00 | 340,000 00 |
| Hadley | 22,855 | 747,405 00 | 739,600 00 | 140,400 00 | 880,000 00 |
| Imlay | 22,940 | 423,660 00 | 379,390 00 | 95,610 00 | 475,000 00 |
| Lapeer | 20,527 | 679,080 00 | 648,390 00 | 101,610 00 | 750,000 00 |
| Mayfield | 21,960 | 402,660 00 | 384,800 00 | 195,200 00 | 580,000 00 |
| Metamora | 22,540 | 754,025 00 | 747,405 00 | 142,595 00 | 890,000 00 |
| Marathon | 20,123 | 462,930 00 | 430,060 00 | 149,940 00 | 580,000 00 |
| North Branch | 23,230 | 378,770 00 | 362,890 00 | 77,110 00 | 440,000 00 |
| Oregon | 22,497 | 358,570 00 | 378,021 00 | 46,979 00 | 425,000 00 |
| Rich | 21,964 | 257,025 00 | 279,080 00 | 20,920 00 | 300,000 00 |
| Lapeer City— | | | | | |
| 1st Ward | ---------- | 239,980 00 | 248,480 00 | 114,900 00 | 363,380 00 |
| 2d Ward | ---------- | 206,850 00 | 214,350 00 | 85,470 00 | 299,820 00 |
| 3d Ward | ---------- | 111,130 00 | 115,130 00 | 16,900 00 | 132,030 00 |
| 4th Ward | ---------- | 344,510 00 | 356,570 00 | 108,200 00 | 464,770 00 |
| Totals | 412,392 | $10,011,380 00 | $10,009,876 00 | $2,125,124 00 | $12,135,000 00 |

STATE OF MICHIGAN, }
COUNTY OF LAPEER, } ss.

We, George W. Carpenter, Chairman, and H. A. Birdsall, Clerk, of the Board of Supervisors of the County of Lapeer, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Lapeer aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the city of Lapeer, on the 14th day of June, A. D. 1881.

{ L. S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 18th day of June, A. D. 1881.

G. W. CARPENTER,
*Chairman Board of Supervisors of Lapeer County.*

H. A. BIRDSALL,
*Clerk of Board of Supervisors of Lapeer County.*

## TABLE XXXIX.—LEELANAW COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Leelanaw for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Leelanaw | 24,725.78 | $86,645 00 | $98,540 00 | $29,210 00 | $127,750 00 |
| Bingham | 29,940.49 | 92,625 00 | 115,040 00 | 16,660 00 | 131,700 00 |
| Elmwood | 12,981.84 | 44,307 00 | 51,924 00 | 12,085 00 | 64,009 00 |
| Solon | 14,664.07 | 39,250 00 | 43,992 00 | 5,630 00 | 49,622 00 |
| Kasson | 22,631.35 | 51,500 00 | 67,893 00 | 4,565 00 | 72,458 00 |
| Empire | 21,768.52 | 52,933 00 | 65,294 00 | 4,903 00 | 70,197 00 |
| Glen Arbor | 9,987.24 | 35,750 00 | 33,955 00 | 14,951 00 | 48,906 00 |
| Cleveland | 17,628.08 | 41,093 00 | 52,955 00 | 4,724 00 | 57,679 00 |
| Centerville | 15,059.96 | 38,398 00 | 45,177 00 | 8,722 00 | 53,899 00 |
| Leland | 13,844.46 | 74,200 00 | 61,994 00 | 35,820 00 | 97,814 00 |
| Totals | 183,231.79 | $556,701 00 | $636,764 00 | $137,270 00 | $774,034 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF LEELANAW, }

We, A. B. Dunlap, Chairman, and A. John, Deputy Clerk, of the Board of Supervisors of the County of Leelanaw, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Leelanaw aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the village of Northport, in the township of Leelanaw, on the 13th and 14th days of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this fourteenth day of June, A. D. 1881.

A. B. DUNLAP,
*Chairman Board of Supervisors of Leelanaw County.*

A. JOHN,
*Deputy Clerk of Board of Supervisors of Leelanaw County.*

## TABLE XL.—LENAWEE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Lenawee for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Adrian City— | | | | | |
| 1st Ward | ---------- | $565,340 00 | $565,340 00 | $247,650 00 | $812,990 00 |
| 2d Ward | ---------- | 684,357 00 | 684,357 00 | 335,350 00 | 1,019,707 00 |
| 3d Ward | ---------- | 545,062 00 | 545,062 00 | 186,400 00 | 731,462 00 |
| 4th Ward | ---------- | 678,294 00 | 678,294 00 | 263,975 00 | 942,269 00 |
| Adrian | 22,565 | 1,059,740 00 | 1,141,523 00 | 108,600 00 | 1,250,123 00 |
| Blissfield | 12,952 | 619,365 00 | 572,334 00 | 164,495 00 | 736,829 00 |
| Cambridge | 20,355 | 690,375 00 | 714,662 00 | 122,642 00 | 837,304 00 |
| Clinton | 11,147 | 901,920 00 | 901,920 00 | 286,090 00 | 1,188,010 00 |
| Deerfield | 15,388 | 452,990 00 | 442,208 00 | 86,110 00 | 528,318 00 |
| Dover | 22,267 | 951,060 00 | 951,060 00 | 188,120 00 | 1,039,180 00 |
| Fairfield | 28,433 | 968,040 00 | 1,008,286 00 | 206,850 00 | 1,210,136 00 |
| Franklin | 22,325 | 1,012,580 00 | 1,012,580 00 | 159,325 00 | 1,171,905 00 |
| Hudson | 22,929 | 1,759,680 00 | 1,675,630 00 | 341,590 00 | 2,017,220 00 |
| Macon | 20,580 | 816,525 00 | 777,967 00 | 147,428 00 | 925,395 00 |
| Madison | 19,910 | 1,007,380 00 | 1,007,380 00 | 200,950 00 | 1,208,330 00 |
| Medina | 29,990 | 1,151,910 00 | 1,151,910 00 | 156,420 00 | 1,308,330 00 |
| Ogden | 26,893 | 581,030 00 | 648,176 00 | 90,430 00 | 738,606 00 |
| Palmyra | 22,763 | 680,720 00 | 759,328 00 | 105,300 00 | 864,628 00 |
| Raisin | 21,694 | 1,127,620 00 | 1,101,091 00 | 198,830 00 | 1,299,921 00 |
| Ridgeway | 17,193 | 542,725 00 | 542,725 00 | 79,260 00 | 622,085 00 |
| Riga | 25,967 | 427,950 00 | 427,950 00 | 41,685 00 | 469,635 00 |
| Rollin | 21,170 | 772,820 00 | 772,820 00 | 106,450 00 | 879,270 00 |
| Rome | 22,952 | 871,385 00 | 951,702 00 | 132,580 00 | 1,084,282 00 |
| Seneca | 25,409 | 1,173,223 00 | 1,229,714 00 | 239,068 00 | 1,468,782 00 |
| Tecumseh | 10,783 | 1,582,970 00 | 1,421,911 00 | 430,270 00 | 1,852,181 00 |
| Woodstock | 21,171 | 545,880 00 | 698,606 00 | 90,480 00 | 789,086 00 |
| Totals | 463,836 | $22,170,841 00 | $22,379,536 00 | $4,666,428 00 | $27,045,964 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF LENAWEE, }

We, Jesse H. Warren, Chairman, and Thomas M. Hunter, Clerk, of the Board of Supervisors of the County of Lenawee, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Lenawee aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the City of Adrian, in the said county, on the 18th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 23d day of June, A. D. 1881.

JESSE H. WARREN,
*Chairman Board of Supervisors of Lenawee County.*

THOMAS M. HUNTER,
*Clerk of Board of Supervisors of Lenawee County.*

## TABLE XLI.—LIVINGSTON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Livingston for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Brighton | 23,034 | $762,660 00 | $557,910 00 | $149,340 00 | $707,250 00 |
| Conway | 23,909 | 505,220 00 | 362,561 00 | 75,715 00 | 438,276 00 |
| Cohoctah | 23,748 | 630,650 00 | 297,804 00 | 120,140 00 | 417,944 00 |
| Deerfield | 23,394 | 533,289 00 | 467,311 00 | 91,773 00 | 559,084 00 |
| Genoa | 22,901 | 516,800 00 | 457,264 00 | 84,570 00 | 541,834 00 |
| Green Oak | 23,123 | 741,075 00 | 447,974 00 | 93,860 00 | 541,834 00 |
| Hamburg | 21,620 | 419,760 00 | 391,695 00 | 99,470 00 | 491,165 00 |
| Hartland | 23,280 | 491,100 00 | 500,640 00 | 74,360 00 | 575,000 00 |
| Howell | 21,689 | 1,447,895 00 | 683,835 00 | 489,165 00 | 1,173,000 00 |
| Handy | 21,590 | 498,830 00 | 597,560 00 | 63,690 00 | 661,250 00 |
| Iosco | 23,413 | 305,065 00 | 372,288 00 | 50,475 00 | 422,763 00 |
| Marion | 22,356 | 760,140 00 | 425,760 00 | 151,540 00 | 577,300 00 |
| Oceola | 23,259 | 575,110 00 | 500,140 00 | 77,160 00 | 577,300 00 |
| Putnam | 22,856 | 746,085 00 | 453,145 00 | 97,265 00 | 550,410 00 |
| Tyrone | 21,451 | 806,410 00 | 440,200 00 | 111,800 00 | 552,000 00 |
| Unadilla | 21,639 | 632,085 00 | 399,080 00 | 152,920 00 | 552,000 00 |
| Totals | 362,262 | $10,372,174 00 | $7,355,167 00 | $1,983,243 00 | $9,338,410 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF LIVINGSTON, }

We, Giles Lee, Chairman, and Newton T. Kirk, Clerk, of the Board of Supervisors of the County of Livingston, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Livingston aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Howell, on the fifteenth day of June, A. D. 1881.

{ L.S. } IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this fifteenth day of June, A. D. 1881.

GILES LEE,
*Chairman Board of Supervisors of Livingston County.*

NEWTON T. KIRK,
*Clerk of Board of Supervisors of Livingston County.*

## TABLE XLII.—MACKINAC COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Mackinac for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | REAL ESTATE. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Holmes | 33,713.64 | $210,049 00 | $210,049 00 | $26,540 00 | $236,589 00 |
| St. Ignace | 12,834.01 | 104,868 25 | 104,868 25 | 43,506 25 | 148,374 50 |
| Moran | 58,891.51 | 218,649 00 | 218,649 00 | 16,773 00 | 235,422 00 |
| Hendricks | 105,202.67 | 416,604 90 | 416,604 90 | 23,884 00 | 440,488 90 |
| Newton | 36,987.80 | 172,561 00 | 172,561 00 | 6,430 00 | 178,991 00 |
| Brevort | 28,113.95 | 94,097 00 | 94,097 00 | 5,640 00 | 99,737 00 |
| Lakefield | 17,407.75 | 63,373 31 | 63,373 31 | 1,000 00 | 64,373 31 |
| Totals | 293,151.33 | $1,280,202 46 | $1,280,202 46 | $123,753 25 | $1,403,955 71 |

STATE OF MICHIGAN, } ss.
COUNTY OF MACKINAC, }

We, William B. Preston, Chairman, and John Biddle, Clerk, of the Board of Supervisors of the County of Mackinac, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Mackinac aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county at their session held at the village of Mackinaw, in the Court House, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this thirteenth day of June, A. D. 1881.

W. B. PRESTON,
*Chairman Board of Supervisors of Mackinac County.*

JOHN BIDDLE,
*Clerk of Board of Supervisors of Mackinac County.*

## TABLE XLIII.—MACOMB COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Macomb for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Armada | 22,780 | $969,130 00 | $950,860 00 | $171,140 00 | $1,122,000 00 |
| Bruce | 23,040 | 1,233,910 00 | 1,238,250 00 | 549,750 00 | 1,788,000 00 |
| Clinton | 18,662 | 696,750 00 | 806,650 00 | 87,350 00 | 894,000 00 |
| Chesterfield | 19,120 | 794,170 00 | 785,670 00 | 128,330 00 | 914,000 00 |
| Erin | 17,547 | 1,040,410 00 | 1,001,480 00 | 119,520 00 | 1,121,000 00 |
| Harrison | 9,200 | 257,525 00 | 251,900 00 | 36,100 00 | 288,000 00 |
| Lenox | 23,480 | 855,230 00 | 852,960 00 | 140,040 00 | 993,000 00 |
| Macomb | 22,810 | 775,880 00 | 872,720 00 | 80,280 00 | 953,000 00 |
| Ray | 22,706 | 778,650 00 | 816,320 00 | 77,680 00 | 894,000 00 |
| Richmond | 24,187 | 964,540 00 | 992,685 00 | 209,315 00 | 1,202,000 00 |
| Shelby | 22,954 | 808,770 00 | 787,680 00 | 226,320 00 | 1,014,000 00 |
| Sterling | 22,935 | 811,260 00 | 850,170 00 | 122,830 00 | 973,000 00 |
| Warren | 22,844 | 975,760 00 | 924,650 00 | 89,350 00 | 1,014,000 00 |
| Washington | 23,043 | 1,332,880 00 | 1,246,934 00 | 491,066 00 | 1,738,000 00 |
| City of Mt. Clemens— | | | | | |
| 1st Ward | 645 | 260,600 00 | 253,000 00 | 164,000 00 | 417,000 00 |
| 2d Ward | 489 | 347,600 00 | 327,450 00 | 99,550 00 | 427,000 00 |
| 3d Ward | 113 | 214,600 00 | 197,600 00 | 50,400 00 | 248,000 00 |
| Totals | 296,055 | $13,167,685 00 | $13,156,979 00 | $2,843,021 00 | $16,000,000 00 |

STATE OF MICHIGAN, }
COUNTY OF MACOMB, } ss.

We, A. L. Goff, Chairman, and Wm. L. Dicken, Clerk, of the Board of Supervisors of the County of Macomb, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Macomb aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Clerk's Office in the city of Mt. Clemens, on the 13th, 14th, and 15th days of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this fifteenth day of June, A. D. 1881.

A. L. GOFF,
*Chairman Board of Supervisors of Macomb County.*

WM. L. DICKEN,
*Clerk of Board of Supervisors of Macomb County.*

## TABLE XLIV.—MANISTEE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Manistee for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| City of Manistee— | | | | | |
| 1st Ward | ---------- | $78,990 00 | $78,990 00 | $51,400 00 | $130,390 00 |
| 2d Ward | ---------- | 195,310 00 | 195,310 00 | 109,350 00 | 304,660 00 |
| 3d Ward | ---------- | 154,100 00 | 154,100 00 | 80,050 00 | 234,150 00 |
| 4th Ward | ---------- | 119,640 00 | 119,640 00 | 60,100 00 | 179,740 00 |
| Filer | 8,969.89 | 59,110 00 | 59,110 00 | 27,870 00 | 86,980 00 |
| Stronach | 74,790.40 | 138,487 00 | 138,487 00 | 22,195 00 | 161,682 00 |
| Manistee | 25,823.40 | 125,100 00 | 125,100 00 | 59,310 00 | 184,410 00 |
| Brown | 63,240.78 | 100,970 00 | 100,970 00 | 4,450 00 | 105,420 00 |
| Marilla | 20,155.34 | 30,440 00 | 30,440 00 | 2,150 00 | 32,590 00 |
| Maple Grove | 19,845.05 | 28,215 00 | 28,215 00 | 785 00 | 29,000 00 |
| Bear Lake | 20,029.00 | 40,745 00 | 45,745 00 | 13,015 00 | 58,760 00 |
| Onekama | 10,471.31 | 31,050 00 | 31,050 00 | 13,310 00 | 44,360 00 |
| Arcadia | 11,854.81 | 28,340 00 | 28,340 00 | 6,275 00 | 34,615 00 |
| Pleasanton | 18,692.35 | 32,803 00 | 34,771 00 | 6,843 00 | 41,614 00 |
| Springdale | 16,336.07 | 13,650 00 | 13,650 00 | 2,790 00 | 16,440 00 |
| Cleon | 21,815.67 | 42,999 00 | 40,499 00 | 5,940 00 | 46,439 00 |
| Totals | 312,024.07 | $1,219,949 00 | $1,224,417 00 | $466,833 00 | $1,691,250 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF MANISTEE, }

We, Seymour Calkins, Chairman, and T. Geo. Hislop, Deputy Clerk, of the Board of Supervisors of the County of Manistee, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Manistee aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the city of Manistee, on Friday, the 17th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 18th day of June, A. D. 1881.

SEYMOUR CALKINS,
*Chairman Board of Supervisors of Manistee County.*

T. GEO. HISLOP,
*Dep. Clerk of Board of Supervisors of Manistee County.*

## TABLE XLV.—MANITOU COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Manitou for the year 1881.*

(Received at Auditor General's Office, Sept. 30, too late to be submitted to State Board of Equalization.)

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Chandler | 1,844.55 | $12,000 00 | $12,000 00 | $6,675 00 | $18,675 00 |
| Unorganized Territory | 17,374.79 | 21,464 00 | 21,464 00 | 3,275 00 | 24,739 00 |
| Galliee | 11,767.73 | 13,911 00 | 13,911 00 | 7,215 00 | 21,126 00 |
| Peaine | 10,040.44 | 12,967 00 | 12,967 00 | 5,833 00 | 18,800 00 |
| Totals | 41,027.51 | $60,342 00 | $60,342 00 | $22,998 00 | $83,340 00 |

STATE OF MICHIGAN, }
COUNTY OF MANITOU, } ss.

We, Frederick Butts, Chairman, and John Dunlevy, Clerk, of the Board of Supervisors of the County of Manitou, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Manitou aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of St. James, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 13th day of June, A. D. 1881.

FREDERICK BUTTS,
*Chairman Board of Supervisors of Manitou County.*

JOHN DUNLEVY,
*Clerk of Board of Supervisors of Manitou County.*

## TABLE XLVI.—MARQUETTE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Marquette for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Ishpeming City | ---------- | $150,525 00 | $88,740 00 | $85,560 00 | $174,300 00 |
| Negaunee City | ---------- | 143,070 00 | 127,625 00 | 40,775 00 | 168,400 00 |
| Marquette City | ---------- | 455,225 00 | 385,700 00 | 64,300 00 | 450,000 00 |
| Marquette | 58,892.33 | 70,820 00 | 57,400 00 | 2,600 00 | 60,000 00 |
| Negaunee | 28,258.82 | 40,290 00 | 38,150 00 | 1,850 00 | 40,000 00 |
| Ishpeming | 77,159.02 | 105,460 00 | 101,650 00 | 1,650 00 | 103,300 00 |
| Forsyth | 130,160.30 | 161,130 00 | 164,800 00 | 600 00 | 165,400 00 |
| Chocolay | 120,801.34 | 155,010 00 | 146,875 00 | 13,125 00 | 160,000 00 |
| Tilden | 72,708.70 | 81,240 00 | 82,700 00 | 200 00 | 82,900 00 |
| Richmond | 26,579.72 | 46,650 00 | 44,030 00 | 220 00 | 44,250 00 |
| Ely | 563,808.35 | 855,030 00 | 813,020 00 | 2,700 00 | 815,720 00 |
| Republic | 265,743.00 | 344,935 00 | 351,700 00 | 10,000 00 | 361,700 00 |
| Michigamme | 76,580.35 | 155,570 00 | 146,245 00 | 7,025 00 | 153,270 00 |
| Champion | 88,100.18 | 121,570 00 | 121,350 00 | 4,350 00 | 125,700 00 |
| Totals | 1,503,792.11 | $2,886,525 00 | $2,669,985 00 | $234,955 00 | $2,904,940 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF MARQUETTE, }

We, Peter Pascoe, Chairman, and William Rowland, Clerk, of the Board of Supervisors of the County of Marquette, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Marquette aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said session held at the city of Marquette in the county of Marquette, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 27th day of July, A. D. 1881.

PETER PASCOE,
*Chairman Board of Supervisors of Marquette County.*

WILLIAM ROWLAND,
*Clerk of Board of Supervisors of Marquette County.*

## TABLE XLVII.—MASON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Mason for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | REAL ESTATE. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Amber | 14,168.41 | $133,795 00 | $133,795 00 | $16,820 00 | $150,615 00 |
| Branch | 43,331.07 | 98,650 00 | 98,650 00 | 25,050 00 | 123,700 00 |
| Custer | 19,278.17 | 135,721 00 | 135,721 00 | 18,771 00 | 154,492 00 |
| Eden | 19,802.39 | 110,976 00 | 110,976 00 | 7,565 00 | 118,541 00 |
| Freesoil | 42,193.10 | 114,324 00 | 114,324 00 | 5,165 00 | 119,489 00 |
| Grant | 29,627.71 | 111,555 00 | 111,555 00 | 5,131 00 | 116,686 00 |
| Hamlin | 13,051.50 | 47,026 80 | 47,026 80 | 68,448 00 | 115,474 80 |
| Lincoln | 5,874.12 | 44,140 00 | 44,140 00 | 14,800 60 | 58,940 00 |
| Pere Marquette | 6,887.45 | 131,865 00 | 131,865 00 | 72,588 00 | 204,453 00 |
| Riverton | 21,594.45 | 189,200 00 | 189,200 00 | 21,520 00 | 210,720 00 |
| Summit | 8,211.71 | 77,628 00 | 77,628 00 | 9,742 00 | 87,370 00 |
| Sherman | 39,271.85 | 211,500 00 | 211,500 00 | 6,296 00 | 217,796 00 |
| Victory | 22,551.00 | 105,589 00 | 105,589 00 | 12,357 00 | 117,946 00 |
| Ludington City— | | | | | |
| 1st Ward | ---------- | 166,535 00 | 166,535 00 | 319,140 00 | 485,675 00 |
| 2d Ward | ---------- | 136,625 00 | 136,625 00 | 49,250 00 | 185,875 00 |
| 3d Ward | ---------- | 139,625 00 | 139,625 00 | 21,625 00 | 161,250 00 |
| 4th Ward | ---------- | 262,110 00 | 262,110 00 | 274,112 00 | 536,222 00 |
| Totals | 285,842.93 | $2,216,864 80 | $2,216,864 80 | $948,380 00 | $3,165,244 80 |

STATE OF MICHIGAN, }
COUNTY OF MASON, } ss.

We, Wm. Freeman, Chairman, and Lucius E. Hawley, Clerk of the Board of Supervisors of the County of Mason, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Mason aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the City of Ludington on the 18th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, we have hereunto subscribed our names, and affixed the Seal of said County, this 25th day of July, A. D. 1881.

WM. FREEMAN,
*Chairman Board of Supervisors of Mason County.*

LUCIUS E. HAWLEY,
*Clerk of Board of Supervisors of Mason County.*

## TABLE XLVIII.—MECOSTA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Mecosta for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Ætna | 21,014 | $99,507 00 | $99,507 00 | $23,570 00 | $122,677 00 |
| Austin | 22,498 | 85,968 00 | 103,161 00 | 9,376 00 | 112,537 00 |
| Big Rapids | 18,332 | 141,535 00 | 162,535 00 | 22,505 00 | 185,040 00 |
| Big Rapids City— | | | | | |
| 1st Ward | ---------- | 171,115 00 | 171,115 00 | 48,485 00 | 219,600 00 |
| 2d Ward | ---------- | 196,020 00 | 196,020 00 | 86,345 00 | 282,365 00 |
| 3d Ward | ---------- | 124,525 00 | 124,525 00 | 22,350 00 | 146,875 00 |
| 4th Ward | ---------- | 77,950 00 | 77,950 00 | 3,150 00 | 81,100 00 |
| 5th Ward | ---------- | 60,454 00 | 60,454 00 | 10,985 00 | 71,439 00 |
| Chippewa | 21,629 | 123,990 00 | 117,791 00 | 10,180 00 | 127,971 00 |
| Colfax | 22,463 | 74,769 00 | 82,245 00 | 23,499 00 | 105,744 00 |
| Deerfield | 21,258 | 118,713 00 | 118,713 00 | 16,855 00 | 135,568 00 |
| Fork | 21,475 | 72,535 00 | 72,535 00 | 7,075 00 | 79,610 00 |
| Grant | 21,610 | 78,580 00 | 102,154 00 | 11,437 80 | 113,591 80 |
| Green | 23,426 | 134,639 00 | 181,762 00 | 32,544 00 | 214,306 00 |
| Hinton | 22,604 | 142,827 00 | 157,109 00 | 28,676 00 | 185,785 00 |
| Martiney | 18,697 | 161,208 00 | 177,328 00 | 4,057 00 | 181,385 00 |
| Mecosta | 21,746 | 91,655 00 | 91,655 00 | 18,975 00 | 110,630 00 |
| Millbrook | 23,123 | 141,383 00 | 155,521 00 | 23,497 00 | 179,018 00 |
| Morton | 21,869 | 94,206 00 | 98,916 00 | 19,435 00 | 118,351 00 |
| Sheridan | 19,495 | 89,290 00 | 98,219 00 | 20,664 00 | 118,883 00 |
| Wheatland | 22,534 | 113,126 00 | 124,438 00 | 30,260 00 | 154,698 00 |
| Totals | 343,773 | $2,393,795 00 | $2,573,653 00 | $474,280 80 | $3,047,933 80 |

STATE OF MICHIGAN, }
COUNTY OF MECOSTA, } ss.

We, S. G. Webster, Chairman, and Lewis Toan, Clerk, of the Board of Supervisors of the County of Mecosta, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Mecosta aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the City of Big Rapids, on the 23d day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 21st day of July, A. D. 1881.

S. G. WEBSTER,
*Chairman Board of Supervisors of Mecosta County.*

LEWIS TOAN,
*Clerk of Board of Supervisors of Mecosta County.*

## TABLE XLIX.—MENOMINEE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Menominee for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Breen | 118,540.23 | $218,798 00 | $218,798 00 | $12,930 00 | $231,728 00 |
| Breitung | 68,764.29 | 174,241 00 | 174,241 00 | 18,438 00 | 192,679 00 |
| Cedarville | 34,793.56 | 47,901 00 | 47,901 00 | 10,563 00 | 58,464 00 |
| Ingalliston | 23,865.57 | 37,901 00 | 37,901 00 | 3,410 00 | 41,311 00 |
| Menominee | 174,865.39 | 397,110 00 | 397,110 00 | 196,431 63 | 593,541 63 |
| Nadeau | 43,307.11 | 65,361 54 | 65,361 54 | 1,481 75 | 66,843 29 |
| Norway | 61,398.60 | 171,885 58 | 171,885 58 | 14,373 25 | 186,258 83 |
| Spalding | 153,216.15 | 275,913 00 | 275,913 00 | 25,031 00 | 300,944 00 |
| Stephenson | 38,873.54 | 75,520 00 | 75,520 00 | 10,572 50 | 86,092 50 |
| Totals | 722,624.44 | $1,464,631 12 | $1,464,631 12 | $293,231 13 | $1,757,862 25 |

STATE OF MICHIGAN, } ss.
COUNTY OF MENOMINEE, }

We, Peter A. Van Bergen, Chairman, and Rudolph H. Wendt, Clerk, of the Board of Supervisors of the County of Menominee, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Menominee aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Menominee, on the thirteenth day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this thirteenth day of June, A. D. 1881.

PETER A. VAN BERGEN,
*Chairman Board of Supervisors of Menominee County.*

RUDOLPH H. WENDT,
*Clerk of Board of Supervisors of Menominee County.*

## TABLE L.—MIDLAND COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Midland for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Edenville | 22,400.59 | $173,240 00 | $117,600 00 | $14,760 00 | $132,360 00 |
| Geneva | 21,896.57 | 49,793 00 | 71,162 00 | 2,630 00 | 73,792 00 |
| Homer | 14,284.34 | 48,099 00 | 92,846 00 | 3,842 00 | 96,688 00 |
| Hope | 37,553.02 | 160,040 00 | 178,376 00 | 9,995 00 | 188,371 00 |
| Ingersoll | 22,982.00 | 189,595 00 | 137,892 00 | 12,755 00 | 150,647 00 |
| Jasper | 45,462.67 | 163,590 00 | 181,848 00 | 6,340 00 | 188,188 00 |
| Jerome | 17,421.58 | 41,700 00 | 56,618 00 | 2,860 00 | 59,478 00 |
| Larkin | 23,033.71 | 56,430 00 | 69,114 00 | 3,785 00 | 72,899 00 |
| Lee | 20,413.00 | 40,185 00 | 61,239 00 | 1,082 00 | 62,321 00 |
| Lincoln | 14,312.52 | 39,315 00 | 42,936 00 | 5,260 00 | 48,196 00 |
| Midland | 21,843.83 | 691,135 00 | 544,789 00 | 124,380 00 | 669,169 00 |
| Mt. Haley | 15,118.91 | 42,750 00 | 45,354 00 | 3,200 00 | 48,554 00 |
| Porter | 22,515.67 | 118,260 00 | 90,060 00 | 3,355 00 | 93,415 00 |
| Warren | 22,903.81 | 99,615 00 | 120,155 00 | 5,230 00 | 125,785 00 |
| Totals | 322,206.92 | $1,913,747 00 | $1,810,389 00 | $199,474 00 | $2,009,863 00 |

STATE OF MICHIGAN, }
COUNTY OF MIDLAND, } ss.

We, Robert Potter, Chairman, and Wm. Davidson, Clerk, of the Board of Supervisors of the County of Midland, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Midland aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in Midland City, on the 22d day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 23 day of June, A. D. 1881.

ROBERT POTTER,
*Chairman Board of Supervisors of Midland County.*

WM. DAVIDSON,
*Clerk of Board of Supervisors of Midland County.*

## TABLE LI.—MISSAUKEE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Missaukee for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | REAL ESTATE. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Clam Union | 19,722.85 | $62,487 19 | $60,487 19 | $19,849 00 | $80,336 19 |
| Bradford | 17,669.25 | 63,659 25 | 63,659 25 | 5,870 00 | 69,529 25 |
| Riverside | 20,398.00 | 63,244 00 | 63,244 00 | 6,914 00 | 70,158 00 |
| Reeder | 38,833.63 | 210,166 00 | 210,166 00 | 12,340 00 | 222,506 00 |
| Caldwell | 21,615.60 | 115,811 00 | 115,811 00 | 6,580 00 | 122,391 00 |
| West Branch | 38,633.10 | 206,368 00 | 206,368 00 | 10,829 00 | 217,197 00 |
| Pioneer | 22,577.02 | 98,835 00 | 98,835 00 | 9,988 00 | 108,823 00 |
| Bloomfield | 21,495.72 | 140,147 00 | 120,147 00 | 3,015 00 | 123,162 00 |
| Forest | 21,884.08 | 135,228 00 | 135,228 00 | 2,322 00 | 137,550 00 |
| Norwich | 39,269.69 | 169,840 00 | 184,840 00 | 14,669 00 | 199,509 00 |
| Richland | 21,077.00 | 91,856 00 | 96,856 00 | 1,470 00 | 98,326 00 |
| Ætna | 43,823.92 | 61,081 00 | 81,081 00 | 6,990 00 | 88,071 00 |
| Totals | 326,999.86 | $1,418,722 44 | $1,436,722 44 | $100,836 00 | $1,537,558 44 |

STATE OF MICHIGAN, } ss.
COUNTY OF MISSAUKEE, }

We, Thomas T. Caldwell, Chairman, and Abraham Stout, Clerk, of the Board of Supervisors of the County of Missaukee, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Missaukee aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court Room in Lake City, on the 13th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this sixteenth day of June, A. D. 1881.

{ L. S. }

T. T. CALDWELL,
*Chairman Board of Supervisors of Missaukee County.*

ABRAHAM STOUT,
*Clerk of Board of Supervisors of Missaukee County.*

## TABLE LII.—MONROE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Monroe for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Ash | 22,435 | $791,390 00 | $838,873 40 | $59,380 00 | $898,253 40 |
| Bedford | 24,888 | 679,480 00 | 726,990 10 | 73,750 00 | 800,740 10 |
| Berlin | 22,564 | 621,100 00 | 683,210 00 | 85,340 00 | 768,550 00 |
| Dundee | 30,677 | 1,280,920 00 | 1,280,920 00 | 213,380 00 | 1,494,290 00 |
| Erie | 18,914 | 926,480 00 | 926,480 00 | 104,190 00 | 1,030,670 00 |
| Exeter | 22,933 | 664,995 00 | 664,995 00 | 74,890 00 | 739,885 00 |
| Frenchtown | 28,658 | 995,920 00 | 1,045,716 00 | 89,530 00 | 1,135,246 00 |
| Ida | 23,423 | 533,370 00 | 566,707 00 | 59,886 00 | 626,593 00 |
| LaSalle | 16,603 | 694,820 00 | 694,820 00 | 87,240 00 | 782,060 00 |
| London | 22,703 | 386,425 00 | 386,425 00 | 64,340 00 | 450,765 00 |
| Monroe | 11,300 | 578,310 00 | 578,310 00 | 92,965 00 | 671,275 00 |
| Milan | 22,963 | 682,040 00 | 682,040 00 | 82,290 00 | 764,330 00 |
| Raisinville | 30,540 | 1,013,810 00 | 1,013,810 00 | 114,440 00 | 1,128,250 00 |
| Summerfield | 26,859 | 597,480 00 | 597,480 00 | 101,350 00 | 698,830 00 |
| Whiteford | 25,854 | 728,480 00 | 728,480 00 | 80,210 00 | 808,690 00 |
| Monroe City— | | | | | |
| 1st Ward | ..... | 420,150 00 | 420,150 00 | 40,950 00 | 461,100 00 |
| 2d Ward | ..... | 805,650 00 | 805,650 00 | 352,750 00 | 1,158,400 00 |
| 3d Ward | ..... | 352,030 00 | 352,030 00 | 33,625 00 | 385,655 00 |
| 4th Ward | ..... | 350,575 00 | 350,575 00 | 59,150 00 | 409,725 00 |
| Totals | 351,314 | $13,103,375 00 | $13,363,661 50 | $1,849,615 00 | $15,213,276 50 |

STATE OF MICHIGAN, } ss.
COUNTY OF MONROE,

We, Christian Hertzler, Chairman, and Patrick H. Mathews, Clerk of the Board of Supervisors of the County of Monroe, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Monroe aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Clerk's Office, in the city of Monroe, on the 24th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 25th day of June, A. D. 1881.

CHRISTIAN HERTZLER,
*Chairman Board of Supervisors of Monroe County.*

PATRICK H. MATHEWS,
*Clerk of Board of Supervisors of Monroe County.*

## TABLE LIII.—MONTCALM COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Montcalm for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Belvidere | 22,204 | $158,834 00 | $209,185 00 | $15,815 00 | $225,000 00 |
| Bloomer | 22,690 | 686,580 00 | 422,470 00 | 102,530 00 | 525,000 00 |
| Bushnell | 22,828 | 457,950 00 | 399,394 00 | 45,606 00 | 445,000 00 |
| Cato | 22,080 | 272,600 00 | 224,528 00 | 100,472 00 | 325,000 00 |
| Crystal | 21,629 | 296,822 00 | 286,391 00 | 40,609 00 | 327,000 00 |
| Day | 22,500 | 459,065 00 | 317,335 00 | 122,665 00 | 440,000 00 |
| Douglass | 22,373 | 295,095 00 | 267,410 00 | 27,590 00 | 295,000 00 |
| Eureka | 18,000 | 357,250 00 | 362,190 00 | 32,810 00 | 395,000 00 |
| Evergreen | 21,465 | 224,140 00 | 272,485 00 | 72,515 00 | 345,000 00 |
| Fairplain | 22,753 | 426,095 00 | 387,130 00 | 57,870 00 | 445,000 00 |
| Ferris | 22,978 | 338,440 00 | 307,970 00 | 20,030 00 | 328,000 00 |
| Home | 23,016 | 472,007 00 | 397,300 00 | 127,700 00 | 525,000 00 |
| Montcalm | 22,482 | 358,466 00 | 317,888 00 | 57,112 00 | 375,000 00 |
| Maple Valley | 22,433 | 304,670 00 | 313,980 00 | 131,020 00 | 445,000 00 |
| Pine | 21,201 | 198,190 00 | 174,362 00 | 25,638 00 | 200,000 00 |
| Pierson | 21,864 | 277,190 00 | 295,510 00 | 44,490 00 | 340,000 00 |
| Reynolds | 22,494 | 136,015 00 | 151,185 00 | 48,815 00 | 200,000 00 |
| Richland | 22,598 | 290,240 00 | 254,650 00 | 20,350 00 | 275,000 00 |
| Sidney | 22,339 | 329,025 00 | 263,570 00 | 136,430 00 | 400,000 00 |
| Winfield | 23,058 | 234,030 00 | 260,320 00 | 19,680 00 | 280,000 00 |
| Greenville City— | | | | | |
| 1st Ward | 1,000 | 255,390 00 | 250,890 00 | 44,110 00 | 295,000 00 |
| 2d Ward | 600 | 285,700 00 | 227,500 00 | 157,500 00 | 385,000 00 |
| 3d Ward | 560 | 263,560 00 | 259,600 00 | 55,400 00 | 315,000 00 |
| Stanton City— | | | | | |
| 1st Ward | 492 | 186,800 00 | 146,500 00 | 89,500 00 | 236,000 00 |
| 2d Ward | 880 | 106,280 00 | 84,810 00 | 39,190 00 | 124,000 00 |
| Totals | 446,517 | $7,730,724 00 | $6,854,553 00 | $1,635,447 00 | $8,490,000 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF MONTCALM, }

We, Albert P. Thomas, Chairman, and Joseph M. Fuller, Clerk, of the Board of Supervisors of the County of Montcalm, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Montcalm aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the city of Stanton, on the 16th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this sixteenth day of June, A. D. 1881.

ALBERT P. THOMAS,
*Chairman Board of Supervisors of Montcalm County.*

JOSEPH M. FULLER,
*Clerk of Board of Supervisors of Montcalm County.*

## TABLE LIV.—MONTMORENCY COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Montmorency for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Rust | 84,933.48 | $288,126 00 | $335,000 00 | $3,265 00 | $338,265 00 |
| Montmorency | 83,802.20 | 556,535 00 | 480,000 00 | 6,890 00 | 486,890 00 |
| Briley | 70,611.52 | 355,713 00 | 357,000 00 | 718 00 | 357,718 00 |
| Totals | 239,347.20 | $1,200,374 00 | $1,192,000 00 | $10,873 00 | $1,202,873 00 |

STATE OF MICHIGAN, }
COUNTY OF MONTMORENCY, } ss.

We, Gideon Barton, Chairman, and John C. Adams, Clerk, of the Board of Supervisors of the County of Montmorency, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Montmorency aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Clerk's Office in the township of Rust, on the 29th day of July, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 29th day of July, A. D. 1881.

GIDEON BARTON,
*Chairman Board of Supervisors of Montmorency County.*

JOHN C. ADAMS,
*Clerk of Board of Supervisors of Montmorency County.*

## TABLE LV.—MUSKEGON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Muskegon for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Blue Lake | 20,699.00 | $16,175 00 | $16,175 00 | $2,020 00 | $18,195 00 |
| Casnovia | 22,274.13 | 160,565 00 | 160,565 00 | 19,335 00 | 179,900 00 |
| Cedar Creek | 20,369.75 | 30,516 00 | 30,516 00 | 3,980 00 | 34,496 00 |
| Dalton | 21,287.05 | 33,945 00 | 33,945 00 | 6,030 00 | 39,975 00 |
| Egelston | 19,101.55 | 27,744 00 | 27,744 00 | 2,650 00 | 30,394 00 |
| Fruitport | 33,200.05 | 91,560 00 | 91,560 00 | 6,830 00 | 98,390 00 |
| Fruitland | 22,415.02 | 58,435 00 | 58,435 00 | 5,955 00 | 64,390 00 |
| Holton | 17,579.00 | 44,528 00 | 44,528 00 | 15,279 00 | 59,807 00 |
| Lakeside | 806.90 | 309,800 00 | 77,450 00 | 184,100 00 | 261,550 00 |
| Laketon | 8,151.75 | 145,845 00 | 145,845 00 | 30,260 00 | 176,105 00 |
| Montague | 13,924.42 | 145,155 00 | 145,155 00 | 44,544 00 | 189,699 00 |
| Moorland | 22,522.43 | 43,484 00 | 43,484 00 | 3,404 00 | 46,888 00 |
| Muskegon | 19,456.30 | 100,835 00 | 67,224 00 | 10,970 00 | 78,194 00 |
| Norton | 1,625.00 | 37,860 00 | 37,860 00 | 10,165 00 | 48,025 00 |
| Ravenna | 21,391.00 | 124,050 00 | 124,050 00 | 17,165 00 | 141,215 00 |
| Whitehall | 5,545.50 | 158,550 00 | 158,550 00 | 56,685 00 | 215,235 00 |
| White River | 9,887.00 | 39,565 00 | 39,565 00 | 5,745 00 | 45,310 00 |
| Muskegon City— | | | | | |
| 1st Ward | ---------- | 206,360 00 | 196,042 00 | 57,830 00 | 253,872 00 |
| 2d Ward | ---------- | 391,450 00 | 391,450 00 | 222,150 00 | 613,600 00 |
| 3d Ward | ---------- | 243,915 00 | 243,915 00 | 145,940 00 | 389,855 00 |
| 4th Ward | ---------- | 196,445 00 | 206,267 25 | 128,740 00 | 335,007 25 |
| Totals | 279,236.29 | $2,606,782 00 | $2,340,325 25 | $979,777 00 | $3,320,102 25 |

STATE OF MICHIGAN, } ss.
COUNTY OF MUSKEGON, }

We, John W. Moon, Chairman, and John Tait, Clerk, of the Board of Supervisors of the County of Muskegon, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Muskegon aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the city of Muskegon, on the 13th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 22d day of July, A. D. 1881.

JOHN W. MOON,
*Chairman Board of Supervisors of Muskegon County.*

JOHN TAIT,
*Clerk of Board of Supervisors of Muskegon County.*

## TABLE LVI.—NEWAYGO COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Newaygo for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Ashland | 22,842 | $146,375 00 | $125,000 00 | $19,860 00 | $144,860 00 |
| Bridgeton | 22,041 | 57,460 00 | 50,000 00 | 9,097 00 | 59,097 00 |
| Beaver | 32,656 | 182,985 00 | 90,000 00 | 4,189 00 | 94,189 00 |
| Brook | 20,196 | 77,765 00 | 60,000 00 | 21,135 00 | 81,135 00 |
| Big Prairie | 43,669 | 147,920 00 | 115,000 00 | 8,595 00 | 123,595 00 |
| Barton | 21,524 | 99,065 00 | 80,000 00 | 4,050 00 | 84,050 00 |
| Croton | 21,094 | 65,560 00 | 60,000 00 | 17,550 00 | 77,550 00 |
| Denver | 20,000 | 107,500 00 | 100,000 00 | 13,310 00 | 113,310 00 |
| Dayton | 23,868 | 154,225 00 | 160,000 00 | 17,970 00 | 177,970 00 |
| Ensley | 22,740 | 131,900 00 | 125,000 00 | 20,090 00 | 145,090 00 |
| Everett | 22,440 | 72,268 00 | 50,000 00 | 11,845 00 | 61,845 00 |
| Grant | 21,077 | 48,865 00 | 50,000 00 | 2,780 00 | 52,780 00 |
| Garfield | 21,379 | 96,525 00 | 100,000 00 | 29,610 00 | 129,610 00 |
| Lincoln | 22,535 | 93,790 00 | 60,000 00 | 19,225 00 | 79,225 00 |
| Monroe | 66,915 | 192,345 00 | 185,000 00 | 15,415 00 | 200,415 00 |
| Norwich | 22,833 | 80,825 00 | 80,000 00 | 19,845 00 | 99,845 00 |
| Sherman | 22,449 | 115,220 00 | 80,000 00 | 7,320 00 | 87,320 00 |
| Sheridan | 22,119 | 131,880 00 | 100,000 00 | 12,605 00 | 112,605 00 |
| Troy | 32,594 | 97,280 00 | 90,000 00 | 5,460 00 | 95,460 00 |
| Wilcox | 22,733 | 131,983 00 | 60,000 00 | 66,350 00 | 126,350 00 |
| Totals | 527,704 | $2,181,791 00 | $1,820,000 00 | $326,292 00 | $2,146,292 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF NEWAYGO, }

We, James Barton, Chairman, and G. Fillmore Cole, Clerk, of the Board of Supervisors of the County of Newaygo, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Newaygo aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county at their session held at the village of Newaygo, in the Court House, on the 15th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 23d day of June, A. D. 1881.

JAMES BARTON,
*Chairman Board of Supervisors of Newaygo County.*

G. FILLMORE COLE,
*Clerk of Board of Supervisors of Newaygo County.*

## TABLE LVII.—OAKLAND COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Oakland for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Addison | 21,180 | $503,130 00 | $488,130 00 | $98,290 00 | $586,420 00 |
| Avon | 22,633 | 1,031,220 00 | 1,056,220 00 | 293,890 00 | 1,350,110 00 |
| Bloomfield | 20,880 | 994,950 00 | 1,034,950 00 | 253,160 00 | 1,288,110 00 |
| Brandon | 23,012 | 468,750 00 | 488,750 00 | 94,460 00 | 583,210 00 |
| Commerce | 20,610 | 634,040 00 | 611,040 00 | 132,480 00 | 743,520 00 |
| Farmington | 22,960 | 1,068,570 00 | 1,033,570 00 | 171,870 00 | 1,205,440 00 |
| Groveland | 22,857 | 413,920 00 | 413,920 00 | 71,795 00 | 485,715 00 |
| Highland | 22,084 | 557,460 00 | 602,460 00 | 84,230 00 | 686,690 00 |
| Holly | 23,000 | 670,790 00 | 670,790 00 | 166,350 00 | 837,140 00 |
| Independence | 19,414 | 818,140 00 | 758,140 00 | 128,600 00 | 886,740 00 |
| Lyon | 22,176 | 956,800 00 | 843,800 00 | 174,770 00 | 1,018,570 00 |
| Milford | 22,120 | 990,480 00 | 860,480 00 | 187,910 00 | 1,048,390 00 |
| Novi | 22,843 | 925,050 00 | 910,050 00 | 130,975 00 | 1,041,025 00 |
| Oakland | 21,400 | 734,560 00 | 744,560 00 | 135,110 00 | 879,670 00 |
| Orion | 21,887 | 665,680 00 | 565,680 00 | 96,850 00 | 662,530 00 |
| Oxford | 21,642 | 860,145 00 | 770,145 00 | 164,810 00 | 934,955 00 |
| Pontiac | 17,698 | 712,535 00 | 742,535 00 | 112,607 00 | 855,142 00 |
| Pontiac City— | | | | | |
| 1st Ward | 662 | 300,675 00 | 274,675 00 | 123,750 00 | 398,425 00 |
| 2d Ward | 478 | 305,960 00 | 294,960 00 | 65,005 00 | 359,965 00 |
| 3d Ward | 910 | 487,940 00 | 447,940 00 | 156,410 00 | 604,350 00 |
| 4th Ward | 648 | 594,850 00 | 564,850 00 | 298,200 00 | 863,050 00 |
| Rose | 22,900 | 487,100 00 | 487,100 00 | 64,570 00 | 551,670 00 |
| Royal Oak | 22,530 | 806,880 00 | 626,880 00 | 50,670 00 | 677,550 00 |
| Southfield | 22,500 | 850,580 00 | 780,580 00 | 151,320 00 | 931,900 00 |
| Springfield | 19,420 | 563,360 00 | 538,360 00 | 80,350 00 | 618,710 00 |
| Troy | 22,641 | 1,054,800 00 | 1,000,800 00 | 123,750 00 | 1,124,550 00 |
| Waterford | 19,100 | 773,300 00 | 753,300 00 | 119,760 00 | 873,060 00 |
| West Bloomfield | 18,000 | 742,100 00 | 682,100 00 | 135,860 00 | 817,960 00 |
| White Lake | 22,830 | 499,970 00 | 499,970 00 | 90,740 00 | 590,710 00 |
| Totals | 540,520 | $20,473,735 00 | $19,546,735 00 | $3,958,542 00 | $23,505,277 00 |

STATE OF MICHIGAN, }
COUNTY OF OAKLAND, } ss.

We, Matthew D. Ribble, Chairman, and Mark Walter, Clerk of the Board of Supervisors of the County of Oakland, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and wards of the County of Oakland aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House, in the city of Pontiac, on the seventeenth day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this seventeenth day of June, A. D. 1881.

MATTHEW D. RIBBLE,
*Chairman Board of Supervisors of Oakland County*

MARK WALTER,
*Clerk of Board of Supervisors of Oakland County.*

## TABLE LVIII.—OCEANA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Oceana for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Shelby | 22,778.35 | $193,510 00 | $205,510 00 | $32,290 00 | $237,800 00 |
| Hart | 22,500.00 | 219,584 00 | 219,584 00 | 28,655 00 | 248,239 00 |
| Pentwater | 7,551.74 | 154,005 00 | 159,005 00 | 30,775 00 | 189,780 00 |
| Golden | 19,638.93 | 103,326 00 | 110,326 00 | 22,484 00 | 132,810 00 |
| Benona | 25,271.36 | 117,465 00 | 127,465 00 | 15,875 00 | 143,340 00 |
| Clay Banks | 14,743.36 | 87,280 00 | 87,280 00 | 14,640 00 | 101,920 00 |
| Elbridge | 22,545.50 | 94,176 00 | 94,176 00 | 6,660 00 | 100,836 00 |
| Newfield | 22,518.29 | 58,855 00 | 58,855 00 | 9,178 00 | 68,033 00 |
| Grant | 22,119.96 | 72,258 00 | 72,258 00 | 7,075 00 | 79,333 00 |
| Ferry | 22,496.00 | 77,998 00 | 77,998 00 | 8,761 00 | 86,759 00 |
| Weare | 22,344.00 | 75,554 00 | 87,754 00 | 4,770 00 | 92,524 00 |
| Crystal | 21,600.00 | 61,930 00 | 59,930 00 | 7,705 00 | 67,635 00 |
| Leavitt | 20,132.00 | 57,425 00 | 57,425 00 | 3,814 00 | 61,239 00 |
| Colfax | 22,640.00 | 80,270 00 | 80,270 00 | 1,060 00 | 81,330 00 |
| Otto | 21,616.80 | 35,375 00 | 30,375 00 | 970 00 | 31,345 00 |
| Greenwood | 22,820.00 | 47,915 00 | 47,915 00 | 4,755 00 | 52,670 00 |
| Totals | 333,316.29 | $1,536,926 00 | $1,576,126 00 | $199,467 00 | $1,775,593 00 |

STATE OF MICHIGAN, }
COUNTY OF OCEANA, } ss.

We, Henry C. Hawley, Chairman, and E. D. Richmond, Clerk, of the Board of Supervisors of the County of Oceana, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Oceana aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Hart, on the 13th, 14th, 15th, and 16th days of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 16th day of June, A, D. 1881.

HENRY C. HAWLEY,
*Chairman Board of Supervisors of Oceana County.*

E. D. RICHMOND,
*Clerk of Board of Supervisors of Oceana County.*

## TABLE LIX.—OGEMAW COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Ogemaw for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Beaver Lake | 16,908.20 | $66,875 00 | $75,000 00 | $13,935 00 | $88,935 00 |
| Cumming | 41,859.94 | 64,778 28 | 66,900 00 | 2,055 32 | 68,955 32 |
| Churchill | 45,805.86 | 79,913 60 | 82,000 00 | 2,180 00 | 84,180 00 |
| Edwards | 45,755.59 | 104,390 00 | 165,000 00 | 5,125 00 | 170,125 00 |
| Foster | 7,907.88 | 15,622 30 | 20,900 00 | 5,350 00 | 26,250 00 |
| Klacking | 30,066.11 | 69,221 00 | 90,000 00 | 5,944 50 | 95,944 50 |
| Ogemaw | 32,149.09 | 132,239 23 | 250,000 00 | 6,955 00 | 256,955 00 |
| Rose | 57,756.02 | 133,172 78 | 136,700 00 | 3,482 00 | 140,182 00 |
| Richland | 40,981.33 | 189,037 50 | 180,000 00 | 5,396 50 | 185,396 50 |
| Totals | 319,190.02 | $855,259 69 | $1,066,500 00 | $50,433 32 | $1,116,933 32 |

STATE OF MICHIGAN, }
COUNTY OF OGEMAW, } ss.

We, E. C. Hill, Chairman, and Fred M. Briggs, Clerk, of the Board of Supervisors of the County of Ogemaw, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Ogemaw aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of West Branch, on the sixteenth day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this sixteenth day of June, A, D. 1881.

E. C. HILL,
*Chairman Board of Supervisors of Ogemaw County.*

FRED M. BRIGGS,
*Clerk of Board of Supervisors of Ogemaw County.*

## TABLE LX.—ONTONAGON COUNTY.

***STATEMENT** of the Valuation of Taxable Property in the several Townships and Cities of the County of Ontonagon for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | REAL ESTATE. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Ontonagon | 316,998.42 | $523,950 00 | $343,950 00 | $11,975 00 | [illegible] |
| Rockland | 57,883.96 | 205,983 00 | 159,983 00 | 16,355 00 | [illegible] |
| Greenland | 66,632.90 | 193,154 00 | 135,740 00 | 15,525 00 | [illegible] |
| Carp Lake | 298,294.01 | 447,030 00 | 337,030 00 | 1,000 00 | [illegible] |
| Totals | 739,809.29 | $1,370,117 00 | $976,703 00 | $44,855 00 | $1,021,558 00 |

STATE OF MICHIGAN, }
COUNTY OF ONTONAGON, } ss.

We, Wm. E. Parnell, Chairman *pro tem.*, and M. A. Powers, Clerk, of the Board of Supervisors of the County of Ontonagon, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Ontonagon aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the village of Ontonagon, in said county, on the twentieth day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this twentieth day of June, A. D. 1881.

{L. S.}

WM. E. PARNELL,
*Chairman pro tem. Board of Supervisors of Ontonagon County.*

M. A. POWERS,
*Clerk of Board of Supervisors of Ontonagon County.*

## TABLE LXI.—OSCEOLA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Osceola for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Richmond | 22,365 | $316,805 00 | $316,805 00 | $64,970 00 | $381,775 00 |
| Lincoln | 22,829 | 119,530 00 | 122,530 00 | 15,250 00 | 137,780 00 |
| Leroy | 22,208 | 96,910 00 | 95,910 00 | 39,325 00 | 135,235 00 |
| Burdell | 22,935 | 94,750 00 | 93,750 00 | 9,560 00 | 103,310 00 |
| Hersey | 22,144 | 100,430 00 | 107,430 00 | 12,670 00 | 120,100 00 |
| Cedar | 22,457 | 58,521 00 | 58,521 00 | 1,510 00 | 60,031 00 |
| Rose Lake | 21,097 | 82,645 00 | 78,645 00 | 29,190 00 | 102,835 00 |
| Sherman | 22,678 | 80,180 00 | 80,180 00 | 6,555 00 | 86,735 00 |
| Evart | 21,962 | 106,810 00 | 111,810 00 | 25,300 00 | 137,110 00 |
| Osceola | 21,877 | 209,000 00 | 199,000 00 | 56,310 00 | 255,310 00 |
| Hartwick | 21,994 | 51,364 00 | 54,364 00 | 3,407 00 | 57,771 00 |
| Highland | 23,834 | 69,550 00 | 69,550 00 | 5,010 00 | 74,560 00 |
| Orient | 22,414 | 62,160 00 | 70,160 00 | 10,525 00 | 80,685 00 |
| Sylvan | 21,122 | 62,820 00 | 62,820 00 | 7,258 00 | 70,078 00 |
| Middle Branch | 22,473 | 51,310 00 | 51,310 00 | 1,900 00 | 53,210 00 |
| Marion | 22,779 | 52,370 00 | 50,370 00 | 1,325 00 | 51,695 00 |
| Totals | 359,177 | $1,607,155 00 | $1,617,155 00 | $289,065 00 | $1,907,220 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF OSCEOLA, }

We, E. C. Cannon, Chairman, and Rolvin D. Simonton, Clerk of the Board of Supervisors of the County of Osceola, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Osceola aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House, in the village of Hersey, on the 13th day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 13th day of June, A. D. 1881.

E. C. CANNON,
*Chairman Board of Supervisors of Osceola County.*

ROLVIN D. SIMONTON,
*Clerk of Board of Supervisors of Osceola County.*

## TABLE LXII.—OSCODA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Oscoda for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Mt. Pindus | 44,056.05 | $151,387 00 | $151,387 00 | $3,725 00 | $155,112 00 |
| Atherton | 57,974.19 | 183,413 00 | 183,413 00 | 2,182 00 | 185,595 00 |
| Comins | 118,607.36 | 405,918 00 | 405,918 00 | 2,843 00 | 408,761 00 |
| Totals | 220,637.60 | $740,718 00 | $740,718 00 | $8,750 00 | $749,468 00 |

STATE OF MICHIGAN, }
COUNTY OF OSCODA, } ss.

We, Coolidge M. Comins, Chairman, and Revilo H. Fosdick, Clerk of the Board of Supervisors of the County of Oscoda, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Oscoda aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Office of the County Clerk, in the township of Atherton, on the thirteenth day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this thirteenth day of June, A. D. 1881.

{L. S.}

COOLIDGE M. COMINS,
*Chairman Board of Supervisors of Oscoda County.*

REVILO H. FOSDICK,
*Clerk of Board of Supervisors of Oscoda County.*

## TABLE LXIII.—OTSEGO COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Otsego for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Charlton | 76,066 | $205,984 00 | $219,684 00 | $635 00 | $220,319 00 |
| Hayes | 40,579 | 125,211 00 | 125,211 00 | 8,985 00 | 134,196 00 |
| Otsego Lake | 29,924 | 106,875 00 | 106,875 00 | 83,422 00 | 190,297 00 |
| Dover | 33,706 | 117,968 00 | 117,968 00 | ..... | 117,968 00 |
| Livingston | 31,166 | 140,031 00 | 140,031 00 | 15,473 00 | 155,504 00 |
| Elmira | 27,432 | 67,567 00 | 67,567 00 | 8,512 00 | 76,079 00 |
| Corwith | 63,613 | 218,160 00 | 221,860 00 | 3,725 00 | 225,585 00 |
| Totals | 302,486 | $981,796 00 | $999,196 00 | $120,752 00 | $1,119,948 00 |

STATE OF MICHIGAN, }
COUNTY OF OTSEGO, } ss.

We, E. Mathews, Chairman, and C. L. Fuller, Deputy Clerk, of the Board of Supervisors of the County of Otsego, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Otsego aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House, in the village of Gaylord, on the 14th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this sixteenth day of July, A. D. 1881.

E. MATHEWS,
*Chairman Board of Supervisors of Otsego County.*

CHAS. L. FULLER,
*Deputy Clerk of Board of Supervisors of Otsego County.*

## TABLE LXIV.—OTTAWA COUNTY.

***STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Ottawa for the year 1881.***

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Allendale | 17,450.00 | $121,651 00 | $121,651 00 | $10,580 00 | $132,231 00 |
| Blendon | 22,339.77 | 138,916 00 | 116,916 00 | 8,718 00 | 125,634 00 |
| Chester | 22,564.81 | 317,020 00 | 380,424 00 | 44,440 00 | 424,864 00 |
| Crockery | 20,173.38 | 165,527 00 | 140,698 00 | 38,616 00 | 179,314 00 |
| Georgetown | 22,592.54 | 314,280 00 | 345,708 00 | 37,457 00 | 383,165 00 |
| Grand Haven City— | | | | | |
| 1st and 2d wards | 876.00 | 499,805 00 | 174,932 00 | 543,625 00 | 718,557 00 |
| 3d and 4th wards | 1,705.50 | 403,730 00 | 141,306 00 | 116,750 00 | 258,056 00 |
| Grand Haven | 18,319.00 | 81,827 00 | 81,827 00 | 5,450 00 | 87,277 00 |
| Holland City | 650.00 | 193,494 00 | 226,387 00 | 75,373 00 | 301,760 00 |
| Holland | 33,038.28 | 360,510 00 | 414,586 00 | 38,260 00 | 452,846 00 |
| Jamestown | 23,223.40 | 350,758 00 | 403,370 00 | 47,074 00 | 450,444 00 |
| Olive | 27,756.54 | 111,005 00 | 183,158 00 | 18,326 00 | 201,484 00 |
| Polkton | 26,899.00 | 368,370 00 | 453,095 00 | 50,945 00 | 504,040 00 |
| Robinson | 24,991.27 | 75,190 00 | 75,190 00 | 6,590 00 | 81,780 00 |
| Spring Lake | 11,179.50 | 250,890 00 | 288,523 00 | 154,925 00 | 443,448 00 |
| Tallmadge | 22,674.62 | 392,475 00 | 404,249 00 | 38,630 00 | 442,879 00 |
| Wright | 22,368.00 | 499,280 00 | 499,280 00 | 65,200 00 | 564,480 00 |
| Zeeland | 22,786.88 | 819,386 00 | 465,380 00 | 99,080 00 | 564,480 00 |
| Totals | 341,608.49 | $5,433,068 00 | $4,916,600 00 | $1,400,019 00 | $6,316,619 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF OTTAWA, }

We, Cornelius Van Loo, Chairman, and George D. Turner, Clerk, of the Board of Supervisors of the County of Ottawa, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Ottawa aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county at their session held at the Court House in the city of Grand Haven, on the 13th, 14th, 15th, and 16th days of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this twentieth day of June, A. D. 1881.

{L. S.}

CORNELIUS VAN LOO,
*Chairman Board of Supervisors of Ottawa County.*

GEORGE D. TURNER,
*Clerk of Board of Supervisors of Ottawa County.*

## TABLE LXV.—PRESQUE ISLE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Presque Isle for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Rogers | 45,220.35 | $178,863 00 | $178,863 00 | $8,036 00 | $186,899 00 |
| Moltke | 24,124.00 | 91,618 00 | 91,618 00 | 1,510 00 | 93,128 00 |
| Presque Isle | 19,147.54 | 49,858 00 | 49,858 00 | 4,145 00 | 54,003 00 |
| Bismark | 28,307.88 | 106,276 00 | 106,276 00 | 260 00 | 106,536 00 |
| Posen | 30,216.24 | 87,068 00 | 87,068 00 | 3,673 00 | 90,741 00 |
| Metz | 37,503.99 | 172,798 00 | 172,798 00 | 266 00 | 173,064 00 |
| Allis | 28,936.70 | 105,690 00 | 105,690 00 | 1,390 00 | 107,080 00 |
| Krakow | 15,637.53 | 55,057 00 | 55,057 00 | 1,255 00 | 56,312 00 |
| Belknap | 38,816.11 | 158,017 99 | 158,017 99 | 4,025 00 | 162,042 99 |
| Totals | 264,910.34 | $1,005,245 99 | $1,005,245 99 | $24,580 00 | $1,029,825 99 |

STATE OF MICHIGAN, }
COUNTY OF PRESQUE ISLE, } ss.

We, Robert Horn, Chairman, and Fred. Denny Larke, Clerk, of the Board of Supervisors of the County of Presque Isle, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Presque Isle aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Union School House in the village of Rogers, on the 13th and 14th days of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this twentieth day of June, A. D. 1881.

ROBERT HORN,
*Chairman Board of Supervisors of Presque Isle County.*

FRED. DENNY LARKE,
*Clerk of Board of Supervisors of Presque Isle County.*

## TABLE LXVI.—ROSCOMMON COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Roscommon for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Nester | 43,977.40 | $243,286 29 | $203,286 29 | $4,000 00 | $207,286 29 |
| Roscommon | 59,586.96 | 241,454 00 | 216,454 00 | 6,095 00 | 222,549 00 |
| Denton | 52,352.62 | 252,316 00 | 217,716 00 | 3,185 00 | 220,901 00 |
| Higgins | 38,714.51 | 104,095 00 | 104,095 00 | 32,642 00 | 136,737 00 |
| St. Helen | 38,382.30 | 114,516 85 | 114,516 85 | 18,750 00 | 133,266 85 |
| Gerrish | 45,009.83 | 97,137 00 | 97,137 00 | 8,255 00 | 105,392 00 |
| Totals | 278,023.62 | $1,052,805 14 | $953,205 14 | $122,927 00 | $1,076,132 14 |

STATE OF MICHIGAN, } ss.
COUNTY OF ROSCOMMON, }

We, Henry L. Parker, Chairman, and Frank Converse, Deputy Clerk, of the Board of Supervisors of the County of Roscommon, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Roscommon aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the village of Roscommon, on the thirteenth day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this sixteenth day of June, A. D. 1881.

{L. S.}

HENRY L. PARKER,
*Chairman Board of Supervisors of Roscommon County.*

FRANK CONVERSE,
*Deputy Clerk of Board of Supervisors of Roscommon County.*

## TABLE LXVII.—SAGINAW COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Saginaw for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Albee | 21,404.00 | $157,038 00 | $105,639 46 | $8,259 00 | $113,898 46 |
| Birch Run | 22,724.21 | 297,290 00 | 305,792 49 | 28,408 00 | 334,200 49 |
| Brady | 22,746.33 | 245,640 00 | 225,988 80 | 17,550 00 | 243,538 80 |
| Bridgeport | 22,199.32 | 465,945 00 | 474,658 17 | 45,530 00 | 520,188 17 |
| Brant | 23,447.00 | 169,650 00 | 167,834 75 | 12,750 00 | 180,584 75 |
| Buena Vista | 20,465.81 | 723,629 00 | 634,563 00 | 25,215 00 | 659,778 00 |
| Blumfield | 22,811.01 | 425,020 00 | 481,958 65 | 40,510 00 | 522,468 65 |
| Chesaning | 22,080.00 | 684,710 00 | 473,545 44 | 84,250 00 | 557,795 44 |
| Chapin | 15,672.00 | 82,740 00 | 93,256 25 | 12,200 00 | 105,456 25 |
| Carrolton | 2,008.00 | 391,290 00 | 410,328 43 | 37,250 00 | 447,478 43 |
| Frankenmuth | 21,907.00 | 639,501 00 | 695,649 18 | 73,455 00 | 769,104 18 |
| Fremont | 21,463.00 | 124,535 00 | 135,882 89 | 6,745 00 | 142,627 89 |
| Jamestown | 9,970.67 | 107,050 00 | 116,470 40 | 9,340 00 | 125,810 40 |
| Jonesfield | 15,674.22 | 87,255 00 | 93,197 06 | 9,709 00 | 102,906 06 |
| Kochville | 24,507.00 | 538,426 00 | 612,565 16 | 39,885 00 | 652,450 16 |
| Lakefield | 14,052.94 | 78,021 00 | 77,139 37 | 2,037 00 | 79,176 37 |
| Maple Grove | 23,776.00 | 492,680 00 | 334,014 56 | 42,435 00 | 376,449 56 |
| Marion | 15,180 00 | 48,930 00 | 48,426 03 | 1,300 00 | 49,726 03 |
| Richland | 23,579.00 | 162,745 00 | 160,971 08 | 14,915 00 | 175,886 08 |
| Saginaw | 15,601.00 | 552,200 00 | 601,014 48 | 32,780 00 | 633,794 48 |
| Spaulding | 14,044.32 | 154,375 00 | 183,304 87 | 9,100 00 | 192,404 87 |
| St. Charles | 23,194.26 | 244,700 00 | 280,547 55 | 45,525 00 | 326,072 55 |
| Swan Creek | 15,299.67 | 106,795 00 | 103,516 40 | 10,520 00 | 114,036 40 |
| Taymouth | 21,688.69 | 208,564 00 | 222,808 92 | 19,310 00 | 242,118 92 |
| Thomastown | 20,503.97 | 253,720 00 | 258,535 60 | 18,250 00 | 276,785 60 |
| Tittabawassee | 22,624.36 | 450,592 00 | 476,861 51 | 45,047 00 | 521,908 51 |
| Zilwaukee | 8,995.24 | 386,840 00 | 398,135 72 | 16,300 00 | 414,435 72 |
| East Saginaw City | ---------- | 6,129,960 00 | 5,615,656 36 | 1,561,695 00 | 7,177,351 36 |
| Saginaw City | ---------- | 3,288,590 00 | 2,937,497 45 | 940,100 00 | 3,877,597 45 |
| Totals | 507,549.02 | $17,703,731 00 | $16,725,660 03 | $3,210,370 00 | $19,936,030 03 |

STATE OF MICHIGAN, }
COUNTY OF SAGINAW, } ss.

We, John Barter, Chairman, and Fred B. Sweet, Clerk of the Board of Supervisors of the County of Saginaw, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Saginaw aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the City of Saginaw on the 22d day of June, A. D. 1881.

IN TESTIMONY WHEREOF, we have hereunto subscribed our names, and affixed the Seal of said County, this 5th day of July, A. D. 1881.

{ L. S. }

J. BARTER,
*Chairman Board of Supervisors of Saginaw County.*

FRED B. SWEET,
*Clerk of Board of Supervisors of Saginaw County.*

## TABLE LXVIII.—SANILAC COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Sanilac for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Delaware | 29,899.00 | $160,870 00 | $160,870 00 | $32,240 00 | $196,110 00 |
| Minden | 22,154.00 | 97,672 00 | 97,672 00 | 15,650 00 | 113,322 00 |
| Austin | 21,556.00 | 61,410 00 | 67,855 00 | 7,145 00 | 75,000 00 |
| Greenleaf | 21,564.95 | 61,420 00 | 61,420 00 | 7,210 00 | 68,630 00 |
| Evergreen | 21,782.00 | 54,615 00 | 54,615 00 | 2,143 00 | 56,758 00 |
| Argyle | 20,054.00 | 40,954 00 | 52,135 00 | 2,865 00 | 55,000 00 |
| Marion | 44,820.00 | 162,465 00 | 162,465 00 | 16,468 00 | 178,933 00 |
| Forester | 15,999.00 | 81,140 00 | 81,140 00 | 9,830 00 | 90,970 00 |
| Sanilac | 25,654.00 | 327,255 00 | 327,255 00 | 46,965 00 | 374,220 00 |
| Bridgehampton | 23,040.00 | 162,985 00 | 162,985 00 | 21,545 00 | 184,530 00 |
| Custer | 21,450.00 | 46,704 00 | 46,704 00 | 2,015 00 | 48,719 00 |
| Moor | 21,210.18 | 63,965 00 | 55,890 00 | 4,110 00 | 60,000 00 |
| Lamotte | 21,051.75 | 54,627 00 | 68,302 00 | 1,698 00 | 69,000 00 |
| Marlette | 34,063.20 | 257,440 00 | 246,120 00 | 38,880 00 | 285,000 00 |
| Elmer | 22,546.29 | 77,765 00 | 63,146 00 | 6,854 00 | 70,000 00 |
| Watertown | 22,142.00 | 109,795 00 | 89,160 00 | 10,840 00 | 100,000 00 |
| Washington | 23,775.02 | 123,785 00 | 134,804 00 | 10,196 00 | 145,000 00 |
| Lexington | 24,480.38 | 493,170 00 | 493,170 00 | 112,380 00 | 605,550 00 |
| Buel | 22,951.74 | 86,050 00 | 90,835 00 | 9,165 00 | 100,000 00 |
| Elk | 21,958.00 | 120,900 00 | 120,900 00 | 15,367 00 | 136,267 00 |
| Flynn | 22,949.30 | 66,060 00 | 60,385 00 | 4,615 00 | 65,000 00 |
| Maple Valley | 21,996.00 | 82,575 00 | 91,765 00 | 8,235 00 | 100,000 00 |
| Speaker | 22,131.61 | 174,715 00 | 195,725 00 | 24,275 00 | 220,000 00 |
| Fremont | 22,005.75 | 136,130 00 | 136,130 00 | 16,545 00 | 152,675 00 |
| Worth | 24,808.44 | 325,780 00 | 325,780 00 | 41,770 00 | 367,550 00 |
| Totals | 595,742.61 | $3,430,247 00 | $3,457,228 00 | $469,026 00 | $3,926,254 00 |

STATE OF MICHIGAN, }
COUNTY OF SANILAC, } ss.

We, Joshua Wixson, Chairman, and A. W. O'Keefe, Clerk, of the Board of Supervisors of the County of Sanilac, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Sanilac aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the village of Sandusky, on the 16th day of June, A. D. 1881.

{L. S.}

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this seventeenth day of June, A. D. 1881.

JOSHUA WIXSON (per O'Keefe),
*Chairman Board of Supervisors of Sanilac County.*

A. W. O'KEEFE,
*Clerk of Board of Supervisors of Sanilac County.*

## TABLE LXIX.—SCHOOLCRAFT COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Schoolcraft for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Hiawatha | 98,841.13 | $168,870 41 | $177,640 00 | $42,891 00 | $220,531 00 |
| Manistique | 112,104.15 | 362,529 00 | 571,362 00 | 99,520 00 | 470,882 00 |
| Munising | 262,449.00 | 1,244,223 00 | 665,613 00 | 54,000 00 | 747,613 00 |
| Onota | 252,731.13 | 466,301 00 | 490,679 00 | 5,000 00 | 495,679 00 |
| Totals | 725,125.41 | $2,279,623 41 | $1,733,294 00 | $201,411 00 | $1,934,705 00 |

STATE OF MICHIGAN, }
COUNTY OF SCHOOLCRAFT, } ss.

We, Joseph Walsh, Chairman, and Adelbert E. Burdick, Clerk, of the Board of Supervisors of the County of Schoolcraft, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Schoolcraft aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the County Seat, in the Clerk's Office, on the 18th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 18th day of June, A. D. 1881.

JOS. WALSH,
*Chairman Board of Supervisors of Schoolcraft County.*

A. E. BURDICK,
*Clerk of Board of Supervisors of Schoolcraft County.*

## TABLE LXX.—SHIAWASSEE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Shiawassee for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Antrim | 22,214.00 | $309,800 00 | $469,670 00 | $63,330 00 | $533,000 00 |
| Bennington | 23,439.34 | 837,070 00 | 715,965 00 | 29,035 00 | 815,000 00 |
| Burns | 22,733.00 | 856,945 00 | 654,034 00 | 160,966 00 | 815,000 00 |
| Caledonia | 18,816.50 | 511,870 00 | 474,170 00 | 58,830 00 | 533,000 00 |
| Fairfield | 15,946.66 | 277,565 00 | 287,390 00 | 38,610 00 | 326,000 00 |
| Hazleton | 23,926.00 | 370,560 00 | 460,400 00 | 28,600 00 | 489,000 00 |
| Middlebury | 15,725.94 | 364,750 00 | 445,150 00 | 43,850 00 | 489,000 00 |
| New Haven | 20,120.14 | 458,255 00 | 457,590 00 | 31,410 00 | 489,000 00 |
| Owosso | 20,682.96 | 664,870 00 | 473,875 00 | 71,125 00 | 545,000 00 |
| Perry | 22,222.25 | 731,670 00 | 649,550 00 | 153,450 00 | 803,000 00 |
| Rush | 22,211.15 | 292,850 00 | 301,715 00 | 30,285 00 | 332,000 00 |
| Sciota | 18,068.16 | 489,485 00 | 484,745 00 | 105,255 00 | 590,000 00 |
| Shiawassee | 22,462.00 | 909,910 00 | 682,950 00 | 162,050 00 | 845,000 00 |
| Venice | 23,744.00 | 591,980 00 | 450,860 00 | 57,140 00 | 508,000 00 |
| Vernon | 22,769.39 | 968,285 00 | 670,285 00 | 172,715 00 | 843,000 00 |
| Woodhull | 17,208.78 | 384,670 00 | 411,550 00 | 40,450 00 | 452,000 00 |
| Owosso City— | | | | | |
| 1st District | 1,334.00 | 430,825 00 | 437,690 00 | 137,310 00 | 575,000 00 |
| 2d District | 1,055.00 | 197,295 00 | 270,715 00 | 68,285 00 | 339,000 00 |
| Corunna City— | | | | | |
| 1st Ward | 565.00 | 223,140 00 | 290,920 00 | 58,080 00 | 349,000 00 |
| 2d Ward | 671.00 | 172,760 00 | 205,750 00 | 39,250 00 | 245,000 00 |
| 3d Ward | 795.00 | 86,600 00 | 98,630 00 | 6,370 00 | 105,000 00 |
| Totals | 336,715.27 | $10,310,648 00 | $9,383,604 00 | $1,626,396 00 | $11,010,000 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF SHIAWASSEE. }

We, N. Ball, Chairman, and F. E. Welch, Clerk, of the Board of Supervisors of the County of Shiawassee, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Shiawassee aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the city of Corunna, on the 16th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this sixteenth day of June, A. D. 1881.

N. BALL,
*Chairman Board of Supervisors of Shiawassee County.*

F. E. WELCH,
*Clerk of Board of Supervisors of Shiawassee County.*

## TABLE LXXI.—ST. CLAIR COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of St. Clair for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Brockway | 22,248 | $401,155 00 | $341,370 00 | $70,378 00 | $411,748 00 |
| Berlin | 22,935 | 451,250 00 | 350,860 00 | 46,380 00 | 397,240 00 |
| Burchville | 10,060 | 158,370 00 | 106,850 00 | 14,384 00 | 121,234 00 |
| Clay | 10,000 | 180,590 00 | 180,000 00 | 48,423 00 | 228,423 00 |
| Columbus | 23,644 | 439,075 00 | 318,100 00 | 40,500 00 | 358,600 00 |
| Casco | 22,755 | 420,470 00 | 350,000 00 | 45,680 00 | 395,680 00 |
| China | 20,955 | 458,875 00 | 393,600 00 | 47,070 00 | 440,670 00 |
| Cottrellville | 12,811 | 566,350 00 | 518,650 00 | 81,350 00 | 600,000 00 |
| Clyde | 23,000 | 464,465 00 | 339,300 00 | 47,193 00 | 386,493 00 |
| East China | 3,833 | 134,655 00 | 120,000 00 | 18,205 00 | 138,205 00 |
| Emmet | 22,058 | 263,700 00 | 256,000 00 | 77,160 00 | 333,160 00 |
| Fort Gratiot | 13,067 | 331,925 00 | 337,700 00 | 23,440 00 | 336,140 00 |
| Greenwood | 22,773 | 297,125 00 | 282,400 00 | 30,365 00 | 312,765 00 |
| Grant | 19,072 | 383,680 00 | 356,900 00 | 55,340 00 | 412,240 00 |
| Ira | 11,173 | 179,085 00 | 144,500 00 | 34,255 00 | 178,755 00 |
| Kimball | 23,040 | 317,945 00 | 216,460 00 | 34,865 00 | 251,325 00 |
| Kenockee | 21,828 | 298,090 00 | 334,700 00 | 26,470 00 | 361,170 00 |
| Lynn | 21,008 | 214,600 00 | 139,000 00 | 26,470 00 | 165,470 00 |
| Mussey | 22,188 | 327,780 00 | 222,100 00 | 68,675 00 | 290,775 00 |
| Port Huron | 10,128 | 123,400 00 | 226,700 00 | 28,675 00 | 255,375 00 |
| Port Huron City— | | | | | |
| 1st Ward | ---------- | 572,975 00 | 386,900 00 | 201,825 00 | 588,725 00 |
| 2d Ward | 10 | 890,375 00 | 598,380 00 | 279,700 00 | 878,080 00 |
| 3d Ward | ---------- | 484,225 00 | 317,880 00 | 111,600 00 | 429,480 00 |
| 4th Ward | 150 | 501,200 00 | 332,780 00 | 67,525 00 | 400,305 00 |
| 5th Ward | 120 | 443,425 00 | 262,500 00 | 34,525 00 | 297,025 00 |
| 6th Ward | 350 | 336,675 00 | 199,200 00 | 30,075 00 | 229,275 00 |
| Riley | 23,800 | 531,970 00 | 395,200 00 | 82,080 00 | 477,280 00 |
| St. Clair | 25,000 | 535,525 00 | 436,000 00 | 49,540 00 | 507,540 00 |
| St. Clair City— | | | | | |
| 1st Ward | 469 | 327,100 00 | 199,080 00 | 119,565 00 | 318,645 00 |
| 2d Ward | 481 | 267,320 00 | 174,300 00 | 73,220 00 | 247,520 00 |
| Wales | 23,520 | 337,300 00 | 323,980 00 | 37,755 00 | 361,735 00 |
| Totals | 432,464 | $11,695,675 00 | $9,183,390 00 | $1,957,688 00 | $11,141,078 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF ST. CLAIR, }

We, L. T. Remer, Chairman, and Horace Baker, Clerk, of the Board of Supervisors of the County of St. Clair, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of St. Clair aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Court House in the city of Port Huron, on the 17th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this eighth day of July, A. D. 1881.

L. T. REMER,
*Chairman Board of Supervisors of St. Clair County.*

HORACE BAKER,
*Clerk of Board of Supervisors of St. Clair County.*

## TABLE LXXII.—ST. JOSEPH COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of St. Joseph for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Leonidas | 22,517 | $691,835 00 | $611,835 00 | $134,290 00 | $746,125 00 |
| Colon | 21,153 | 745,030 00 | 770,080 00 | 195,070 00 | [illegible] |
| Burr oak | 22,561 | 705,100 00 | 730,100 00 | 99,535 00 | [illegible] |
| Fawn River | 12,961 | 353,905 00 | 378,600 00 | 53,000 00 | [illegible] |
| Mendon | 21,660 | 992,565 00 | 1,017,565 00 | 187,235 00 | [illegible] |
| Nottawa | 22,474 | 1,115,870 00 | 1,125,870 00 | 238,208 00 | [illegible] |
| Sherman | 21,943 | 510,320 00 | 515,660 00 | 55,040 00 | [illegible] |
| Sturgis | 12,474 | 1,027,975 00 | 1,027,975 00 | 227,850 00 | [illegible] |
| Park | 21,745 | 898,450 00 | 898,450 00 | 102,800 00 | [illegible] |
| Lockport | 20,609 | 1,712,335 00 | 1,712,335 00 | 701,310 00 | [illegible] |
| Florence | 21,247 | 780,915 00 | 804,325 00 | 100,750 00 | [illegible] |
| White Pigeon | 14,218 | 810,030 00 | 810,030 00 | 167,490 00 | [illegible] |
| Flowerfield | 22,016 | 541,140 00 | 541,140 00 | 63,290 00 | [illegible] |
| Fabius | 20,860 | 515,050 00 | 535,050 00 | 70,300 00 | [illegible] |
| Constantine | 21,921 | 1,234,440 00 | 1,234,440 00 | 399,730 00 | 1,634,170 00 |
| Mottville | 12,006 | 525,930 00 | 525,930 00 | 68,480 00 | 594,410 00 |
| Totals | 312,365 | $12,130,290 00 | $12,239,475 00 | $2,964,373 00 | $15,203,848 00 |

STATE OF MICHIGAN, }
COUNTY OF ST. JOSEPH, } ss.

We, John Cowling, Chairman, and Levant E. White, Clerk, of the Board of Supervisors of the County of St. Joseph, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of St. Joseph aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the village of Centerville, in the county of St. Joseph, on the 13th day of June, A. D. 1881.

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 9th day of July, A. D. 1881.

{L. S.}

JOHN COWLING,
*Chairman Board of Supervisors of St. Joseph County.*

LEVANT E. WHITE,
*Clerk of Board of Supervisors of St. Joseph County.*

## TABLE LXXIII.—TUSCOLA COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Tuscola for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Almer | 21,273 | $268,090 00 | $280,090 00 | $47,744 00 | $427,834 00 |
| Akron | 20,244 | 228,215 00 | 278,215 00 | 24,551 00 | 302,766 00 |
| Arbela | 21,054 | 270,035 00 | 280,095 00 | 31,865 00 | 311,960 00 |
| Columbia | 22,605 | 282,270 00 | 324,270 00 | 34,911 00 | 359,181 00 |
| Dayton | 22,560 | 330,260 00 | 305,260 00 | 32,180 00 | 337,440 00 |
| Denmark | 22,280 | 355,405 00 | 475,405 00 | 27,125 00 | 502,530 00 |
| Elkland | 21,971 | 267,651 00 | 323,651 00 | 50,156 00 | 373,807 00 |
| Elmwood | 22,427 | 281,485 00 | 281,485 00 | 26,020 00 | 307,505 00 |
| Ellington | 21,003 | 150,155 00 | 230,115 00 | 13,635 00 | 243,750 00 |
| Fremont | 23,494 | 250,915 00 | 250,915 00 | 26,560 00 | 277,475 00 |
| Fairgrove | 22,684 | 430,876 00 | 430,876 00 | 44,126 00 | 475,002 00 |
| Gilford | 21,559 | 192,975 00 | 192,975 00 | 28,376 00 | 221,351 00 |
| Indian Fields | 21,829 | 600,815 00 | 600,815 00 | 160,165 00 | 760,980 00 |
| Koylton | 22,280 | 155,900 00 | 255,900 00 | 10,695 00 | 266,595 00 |
| Kingston | 22,289 | 120,621 00 | 175,621 00 | 10,895 00 | 186,516 00 |
| Millington | 23,304 | 402,700 00 | 402,700 00 | 74,050 00 | 476,750 00 |
| Novesta | 23,684 | 96,244 00 | 100,000 00 | 12,375 00 | 112,375 00 |
| Tuscola | 20,008 | 463,109 00 | 463,109 00 | 81,837 00 | 544,946 00 |
| Vassar | 21,586 | 407,955 00 | 407,955 00 | 113,430 00 | 521,385 00 |
| Wells | 20,844 | 188,632 00 | 115,000 00 | 9,209 00 | 124,209 00 |
| Juniata | 22,517 | 480,090 00 | 480,090 00 | 71,860 00 | 551,950 00 |
| Watertown | 21,039 | 367,180 00 | 367,180 00 | 50,650 00 | 417,830 00 |
| Wisner | 9,502 | 46,498 00 | 50,000 00 | 2,221 00 | 52,221 00 |
| Totals | 501,006 | $6,728,071 00 | $7,171,732 00 | $984,626 00 | $8,156,358 00 |

STATE OF MICHIGAN, }
COUNTY OF TUSCOLA, } ss.

We, Emanuel Staley, Chairman, and N. M. Richardson, Clerk, of the Board of Supervisors of the County of Tuscola, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Tuscola aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county at their session held at the Court House in the village of Caro, on the 17th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 20th day of June, A. D. 1881.

EMANUEL STALEY,
*Chairman Board of Supervisors of Tuscola County.*

N. M. RICHARDSON,
*Clerk of Board of Supervisors of Tuscola County.*

## TABLE LXXIV.—VAN BUREN COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Van Buren for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Pine Grove | 22,251.79 | $437,795 00 | $398,385 00 | $71,615 00 | $470,000 00 |
| Bloomingdale | 21,884.28 | 571,725 00 | 625,775 00 | 64,225 00 | 690,000 00 |
| Columbia | 19,422.56 | 380,075 00 | 346,375 00 | 58,625 00 | 405,000 00 |
| Geneva | 23,865.88 | 339,390 00 | 320,670 00 | 69,330 00 | 390,000 00 |
| South Haven | 12,707.16 | 395,075 00 | 401,600 00 | 78,400 00 | 480,000 00 |
| Covert | 22,506.58 | 233,560 00 | 256,080 00 | 98,920 00 | 355,000 00 |
| Bangor | 22,256.10 | 794,780 00 | 678,600 00 | 181,400 00 | 860,000 00 |
| Arlington | 22,484.51 | 753,325 00 | 597,475 00 | 102,525 00 | 700,000 00 |
| Waverly | 21,802.41 | 345,375 00 | 495,775 00 | 39,225 00 | 535,000 00 |
| Almena | 21,993.73 | 431,590 00 | 481,190 00 | 48,810 00 | 530,000 00 |
| Antwerp | 21,099.05 | 560,780 00 | 710,155 00 | 119,845 00 | 830,000 00 |
| Paw Paw | 22,498.70 | 1,106,900 00 | 882,250 00 | 442,750 00 | 1,325,000 00 |
| Lawrence | 21,953.76 | 850,000 00 | 674,000 00 | 131,000 00 | 805,000 00 |
| Hartford | 21,994.20 | 644,300 00 | 667,150 00 | 187,850 00 | 855,000 00 |
| Keeler | 21,642.41 | 702,650 00 | 606,725 00 | 93,275 00 | 700,000 00 |
| Hamilton | 22,239.34 | 501,685 00 | 463,545 00 | 76,455 00 | 540,000 00 |
| Decatur | 22,164.59 | 652,450 00 | 587,292 00 | 252,708 00 | 840,000 00 |
| Porter | 20,917.16 | 740,300 00 | 603,275 00 | 86,725 00 | 690,000 00 |
| Totals | 384,684.21 | $10,493,755 00 | $9,796,317 00 | $2,203,683 00 | $12,000,000 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF VAN BUREN, }

We, Samuel P. Wilson, Chairman, and Chas. E. Heath, Clerk, of the Board of Supervisors of the County of Van Buren, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships of the County of Van Buren aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said county, at their session held at the Clerk's office in the village of Paw Paw, on the 16th day of June, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 18th day of June, A. D. 1881.

SAMUEL P. WILSON,
*Chairman Board of Supervisors of Van Buren County.*

CHAS. E. HEATH,
*Clerk of Board of Supervisors of Van Buren County.*

## TABLE LXXV.—WASHTENAW COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Washtenaw for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Ann Arbor City— | | | | | |
| 1st and 2d Wards | ..... | $1,746,300 00 | $1,805,500 00 | $654,500 00 | $2,460,000 00 |
| 3d and 4th Wards | ..... | 1,036,165 00 | 1,037,850 00 | 212,650 00 | 1,250,000 00 |
| 5th and 6th Wards | ..... | 653,315 00 | 651,475 00 | 108,525 00 | 760,000 00 |
| Ann Arbor | 19,300.00 | 1,143,380 00 | 1,142,580 00 | 142,420 00 | 1,285,000 00 |
| Augusta | 22,520.00 | 594,260 00 | 545,180 00 | 78,820 00 | 624,000 00 |
| Bridgewater | 22,622.38 | 720,285 00 | 896,110 00 | 103,890 00 | 1,000,000 00 |
| Dexter | 19,379.00 | 701,800 00 | 618,440 00 | 151,560 00 | 770,000 00 |
| Freedom | 19,399.00 | 553,520 00 | 870,900 00 | 79,100 00 | 950,000 00 |
| Lima | 22,857.00 | 969,970 00 | 881,655 00 | 146,345 00 | 1,028,000 00 |
| Lodi | 22,486.56 | 865,500 00 | 1,070,700 00 | 179,300 00 | 1,250,000 00 |
| Lyndon | 19,574.00 | 471,660 00 | 534,250 00 | 35,750 00 | 570,000 00 |
| Manchester | 22,585.00 | 1,271,300 00 | 1,236,760 00 | 263,240 00 | 1,500,000 00 |
| Northfield | 23,234.00 | 806,550 00 | 806,580 00 | 108,420 00 | 915,000 00 |
| Pittsfield | 22,400.25 | 1,300,830 00 | 1,304,330 00 | 163,670 00 | 1,468,000 00 |
| Salem | 21,323.00 | 795,160 00 | 1,031,210 00 | 118,790 00 | 1,150,000 00 |
| Saline | 22,577.00 | 1,198,500 00 | 1,372,200 00 | 159,800 00 | 1,532,000 00 |
| Scio | 21,527.00 | 1,406,680 00 | 1,543,840 00 | 275,160 00 | 1,819,000 00 |
| Sharon | 23,000.00 | 1,018,530 00 | 859,710 00 | 140,290 00 | 1,000,000 00 |
| Superior | 21,942.00 | 1,092,350 00 | 1,095,580 00 | 124,420 00 | 1,220,000 00 |
| Sylvan | 20,637.00 | 932,535 00 | 880,755 00 | 337,245 00 | 1,218,000 00 |
| Webster | 22,090.00 | 1,038,780 00 | 955,330 00 | 169,670 00 | 1,125,000 00 |
| York | 21,610.00 | 1,117,640 00 | 1,008,560 00 | 137,440 00 | 1,146,000 00 |
| Ypsilanti | 20,430.00 | 1,159,230 00 | 1,149,080 00 | 145,920 00 | 1,295,000 00 |
| Ypsilanti City— | | | | | |
| 1st District | ..... | 1,158,550 00 | 1,353,000 00 | 527,000 00 | 1,820,000 00 |
| 2d District | ..... | 582,650 00 | 659,700 00 | 125,300 00 | 785,000 00 |
| Totals | 431,493.19 | $24,335,440 00 | $25,310,775 00 | $4,689,225 00 | $30,000,000 00 |

STATE OF MICHIGAN, } ss.
COUNTY OF WASHTENAW, }

We, Thomas D. Lane, Chairman, and Everett B. Clark, Clerk, of the Board of Supervisors of the County of Washtenaw, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several townships and cities of the County of Washtenaw aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the Court House in the City of Ann Arbor, on the 13th day of June, A. D. 1881.

{L.S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said county, this 2d day of July, A. D. 1881.

T. D. LANE,
*Chairman Board of Supervisors of Washtenaw County.*

EVERETT B. CLARK,
*Clerk of Board of Supervisors of Washtenaw County.*

## TABLE LXXVI.—WAYNE COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Wayne for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| City of Detroit— | | | | | |
| 1st Ward | ..... | $6,778,140 00 | $6,778,140 00 | $3,246,470 00 | $10,024,910 00 |
| 2d Ward | ..... | 9,937,400 00 | 9,937,400 00 | 7,977,530 00 | 17,914,930 00 |
| 3d Ward | ..... | 3,364,050 00 | 3,364,050 00 | 992,115 00 | 4,356,165 00 |
| 4th Ward | ..... | 2,310,520 00 | 2,310,520 00 | 592,940 00 | 2,903,460 00 |
| 5th Ward | ..... | 11,244,490 00 | 11,244,490 00 | 1,984,500 00 | 13,228,990 00 |
| 6th Ward | ..... | 8,436,410 00 | 8,436,410 00 | 1,940,840 00 | 10,377,250 00 |
| 7th Ward | ..... | 3,360,620 00 | 3,360,620 00 | 1,982,255 00 | 5,342,875 00 |
| 8th Ward | ..... | 3,191,570 00 | 3,191,570 00 | 357,870 00 | 3,549,440 00 |
| 9th Ward | ..... | 5,950,820 00 | 5,950,820 00 | 792,405 00 | 6,743,225 00 |
| 10th Ward | ..... | 4,618,250 00 | 4,618,250 00 | 1,136,795 00 | 5,755,045 00 |
| 11th Ward | ..... | 2,552,545 00 | 2,552,545 00 | 336,185 00 | 2,888,730 00 |
| 12th Ward | ..... | 2,574,120 00 | 2,574,120 00 | 674,650 00 | 3,248,770 00 |
| 13th Ward | ..... | 2,130,225 00 | 2,130,225 00 | 165,650 00 | 2,295,905 00 |
| Brownstown | 25,000 | 751,060 00 | 932,070 00 | 56,640 00 | 988,710 00 |
| Canton | 22,318 | 922,675 00 | 1,160,730 00 | 105,050 00 | 1,265,780 00 |
| Dearborn | 21,249 | 944,770 00 | 1,378,035 00 | 50,120 00 | 1,428,155 00 |
| Ecorse | 19,900 | 608,060 00 | 1,112,265 00 | 18,320 00 | 1,130,585 00 |
| Greenfield | 23,192 | 1,754,335 00 | 2,177,050 00 | 90,465 00 | 2,267,515 00 |
| Grosse Point | 19,903 | 964,010 00 | 1,699,322 00 | 39,650 00 | 1,738,972 00 |
| Hamtramck | 14,781 | 2,863,851 00 | 3,417,555 00 | 519,488 00 | 3,937,043 00 |
| Huron | 22,539 | 479,720 00 | 572,465 00 | 28,865 00 | 601,330 00 |
| Livonia | 22,836 | 811,710 00 | 968,645 00 | 139,330 00 | 1,107,975 00 |
| Monguagon | 12,286 | 779,070 00 | 1,060,960 00 | 72,480 00 | 1,133,440 00 |
| Nankin | 20,988 | 856,215 00 | 1,194,790 00 | 79,810 00 | 1,274,600 00 |
| Plymouth | 22,986 | 1,518,459 00 | 1,932,565 00 | 369,270 00 | 2,301,835 00 |
| Redford | 22,762 | 1,001,075 00 | 1,194,625 00 | 156,287 00 | 1,350,912 00 |
| Romulus | 23,000 | 525,150 00 | 654,130 00 | 32,760 00 | 686,890 00 |
| Springwells | 13,640 | 2,677,185 00 | 4,447,800 00 | 306,610 00 | 4,754,410 00 |
| Sumpter | 23,438 | 325,340 00 | 478,935 00 | 19,240 00 | 498,175 00 |
| Taylor | 15,121 | 302,051 00 | 379,545 00 | 16,993 00 | 396,538 00 |
| Van Buren | 22,480 | 863,825 00 | 1,120,335 00 | 116,516 00 | 1,236,851 00 |
| City of Wyandotte— | | | | | |
| 1st Ward | ..... | 180,310 00 | 235,460 00 | 28,080 00 | 263,540 00 |
| 2d Ward | ..... | 323,205 00 | 434,650 00 | 123,357 00 | 558,007 00 |
| 3d Ward | ..... | 187,890 00 | 244,505 00 | 44,130 00 | 288,635 00 |
| Totals | 368,415 | $86,099,134 00 | $93,245,597 00 | $24,593,996 00 | $117,839,593 00 |

STATE OF MICHIGAN, }
COUNTY OF WAYNE, } ss.

We, Henry D. Barnard, Chairman, and Robt. A. Liggett, Clerk, of the Board of Supervisors of the County of Wayne, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Wayne, aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the county seat, in the city of Detroit, on the 29th day of June, A. D. 1881.

{L. S.}

IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this seventh day of July, A. D. 1881.

HENRY D. BARNARD,
*Chairman Board of Supervisors of Wayne County.*

ROBT. A. LIGGETT,
*Clerk of Board of Supervisors of Wayne County.*

## TABLE LXXVII.—WEXFORD COUNTY.

*STATEMENT of the Valuation of Taxable Property in the several Townships and Cities of the County of Wexford for the year 1881.*

| TOWNSHIPS. | No. of Acres of Land Assessed. | Real Estate. | | Personal Estate. | Total Equalized Valuation. |
|---|---|---|---|---|---|
| | | As Assessed. | As Equalized. | | |
| Antioch | 28,000.00 | $52,610 00 | $52,610 00 | $8,285 00 | $60,895 00 |
| Boon | 20,620.00 | 53,075 00 | 53,075 00 | 14,766 00 | 67,841 00 |
| Colfax | 23,141.37 | 68,443 00 | 68,443 00 | 2,320 00 | 70,763 00 |
| Cedar Creek | 22,521.00 | 204,920 00 | 204,920 00 | 17,840 00 | 222,760 00 |
| Clam Lake | 20,497.16 | 111,786 00 | 111,786-00 | 10,445 00 | 122,231 00 |
| Cherry Grove | 18,855.70 | 77,155 00 | 77,155 00 | 3,860 00 | 81,015 00 |
| Cadillac— | | | | | |
| 1st Ward | ..... | 30,675 00 | 30,675 00 | 46,300 00 | 76,975 00 |
| 2d Ward | ..... | 58,800 00 | 58,800 00 | 39,500 00 | 98,300 00 |
| 3d Ward | ..... | 88,725 00 | 88,725 00 | 30,875 00 | 119,600 00 |
| Greenwood | 21,844.85 | 88,852 00 | 88,852 00 | 5,360 00 | 94,212 00 |
| Henderson | 17,364.00 | 47,857 00 | 47,857 00 | 4,975 00 | 52,832 00 |
| Hanover | 21,459.30 | 54,924 00 | 54,924 00 | 5,367 00 | 60,291 00 |
| Harring | 21,393 92 | 301,530 00 | 226,147 50 | 48,270 00 | 274,417 50 |
| Liberty | 22,921.00 | 150,320 00 | 112,740 00 | 2,110 00 | 114,850 00 |
| Selma | 21,395.99 | 78,125 00 | 78,125 00 | 6,165 00 | 84,290 00 |
| Springville | 31,030.00 | 83,844 00 | 83,844 00 | 1,645 00 | 85,489 00 |
| South Branch | 22,560.51 | 45,545 00 | 45,545 00 | 970 00 | 46,515 00 |
| Wexford | 23,150.00 | 68,370 00 | 68,370 00 | 21,255 00 | 89,625 00 |
| Totals | 336,753.80 | $1,635,556 00 | $1,552,593 50 | $270,308 00 | $1,822,901 50 |

STATE OF MICHIGAN, } ss.
COUNTY OF WEXFORD, }

We, J. W. Houghtalin, Chairman, and T. J. Thorp, Clerk, of the Board of Supervisors of the County of Wexford, in the State of Michigan, do hereby certify that the within is a true statement of the valuation of taxable property in the several Townships and Cities of the County of Wexford aforesaid, for the year 1881, as assessed, and as equalized by the Board of Supervisors of said County, at their session held at the City Hall, in the City of Cadillac, on the 18th day of July, A. D. 1881.

{L. S.} IN TESTIMONY WHEREOF, We have hereunto subscribed our names, and affixed the Seal of said County, this 6th day of July, A. D. 1881.

J. W. HOUGHTALIN,
*Chairman Board of Supervisors of Wexford County.*

T. J. THORP,
*Clerk of Board of Supervisors of Wexford County*

## TABLE LXXVIII.

*Population for 1854, 1860, 1864, 1870, 1874, and 1880; and Number of Acres of Land Assessed in 1856, 1861, 1866, 1871, 1876, and 1881.*

| COUNTIES. | POPULATION. | | | | | | NUMBER OF ACRES ASSESSED. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1854. | 1860. | 1864. | 1870. | 1874. | 1880. | 1856. | 1861. | 1866. | 1871. | 1876. | 1881. |
| Alcona | a | b | b | 766 | 1,214 | 3,107 | a | b | b | 443,798.37 | 561,296.38 | 366,497.48 |
| Allegan | 7,804 | 10,091 | 18,849 | 32,093 | 32,381 | 37,806 | 464,979.00 | 493,761.00 | 496,043.00 | 505,205.00 | 514,524.00 | 516,120.00 |
| Alpena | a | 291 | 963 | 2,756 | 4,807 | ff 8,789 | a | 237,832.02 | 349,255.26 | 304,879.51 | 465,636.25 | 279,242.60 |
| Antrim | c | c | 391 | 1,985 | 3,240 | 5,237 | c | c | 129,515.99 | 130,881.00 | 244,565.73 | 230,656.96 |
| Baraga | n | n | n | n | n | 1,804 | n | n | n | n | 333,707.44 | 331,531.31 |
| Barry | 7,821 | 14,041 | 14,483 | 22,204 | 22,051 | 25,319 | 232,550.00 | 347,747.00 | 343,054.00 | 347,865.00 | 347,681.97 | 352,302.32 |
| Bay | d | 3,169 | 5,307 | 15,820 | 24,832 | 38,081 | d | 142,078.00 | 198,715.89 | 364,896 50 | * 475,592.53 | 486,970.43 |
| Benzie | e | e | c | 2,184 | 2,663 | 3,433 | e | e | c | 129,064.00 | 177,144.72 | 180,329.45 |
| Berrien | 13,849 | 22,274 | 25,720 | 35,119 | 35,029 | 36,780 | 350,515.00 | 355,087.00 | 349,426.46 | 352,511.00 | 354,836.00 | 352,489.00 |
| Branch | 15,724 | 21,197 | 22,458 | 26,229 | 25,726 | 27,941 | 312,696.00 | 316,793.00 | 311,867.00 | 315,162.60 | 317,386 00 | 315,483.00 |
| Calhoun | 22,768 | 29,398 | 30,488 | 36,571 | 35,655 | 38,452 | 438,188.85 | 438,542.37 | 440,770.00 | 439,174.00 | 439,640.00 | 440,710.00 |
| Cass | 13,124 | 17,805 | 17,776 | 21,097 | 20,525 | 22,008 | 297,875.79 | 302,871.00 | 309,850.00 | 305,875.00 | 310,613.00 | 310,549.00 |
| Charlevoix | c | c | c | 1,724 | 2,360 | 5,114 | c | c | c | 28,367.47 | 170,004.33 | 222,581.00 |
| Cheboygan | | 599 | 483 | 2,197 | 3,070 | 6,524 | 6,450.66 | 22,170.00 | 31,968.00 | 101,041.56 | 315,736.47 | 416,744.28 |
| Chippewa | | 1,544 | 1,158 | 1,690 | 2,170 | 5,243 | | 20,070.03 | 30,640.18 | 135,904.81 | 337,025.01 | 505,283.00 |
| Clare | d | f | f | 266 | 1,354 | 4,187 | d | f | f | 250,494.01 | 313,218.68 | 339,201.73 |
| Clinton | 8,042 | 13,923 | 14,739 | 22,852 | 23,661 | 37,534 | 334,275.00 | 346,550.63 | 349,845.92 | 358,081.00 | 362,730.21 | 361,235.53 |
| Crawford | a | h | i | i | cc | 1,159 | a | h | i | cc | cc | 252,783.00 |
| Delta | k | 1,172 | 561 | 2,441 | 4,741 | 6,812 | k | | | 132,939.00 | 380,796.38 | No report. |
| Eaton | 10,965 | 16,574 | 16,497 | 25,164 | 26,907 | 31,223 | 338,546.00 | 350,679.00 | 358,602.00 | 358,926.00 | 355,863.77 | 358,508.56 |
| Emmet | 4,971 | 1,155 | 1,325 | 1,211 | 1,272 | 6,640 | | 5,913.64 | 21,994.00 | 12,434.34 | 95,506.86 | 191,714.00 |
| Genesee | 15,676 | 22,707 | 22,043 | 33,965 | 34,568 | 39,219 | 388,775.00 | 395,342.00 | 392,991.00 | 400,642 03 | 395,616.57 | 402,015.00 |
| Gladwin | d | l | l | l | l | 1,127 | l | l | l | l | 328,261.74 | 305,912.19 |
| Grand Traverse | 911 | 1,467 | 2,517 | 4,443 | 5,349 | 8,422 | | 164,661.00 | 139,448.26 | 146,844.00 | 264,091.17 | 279,598.79 |
| Gratiot | d | 4,027 | 5,831 | 11,809 | 13,886 | 21,937 | 224,929.00 | 274,602.00 | 280,718.00 | 345,902.00 | 346,998.00 | 357,607.00 |
| Hillsdale | 19,188 | 26,307 | 27,324 | 31,691 | 31,566 | 32,726 | 379,017.28 | 379,202.00 | 377,222.23 | 377,607.00 | 375,851.00 | 375,911.60 |
| Houghton | 4,323 | 9,253 | 8,225 | 13,881 | 19,030 | 22,473 | | 134,869.02 | 284,629.66 | 303,422.47 | 293,849.69 | 411,710.75 |
| Huron | m | 3,167 | 3,961 | 9,049 | 11,064 | 20,069 | m | 135,406.00 | 250,750.00 | 389,521.00 | 460,664.00 | 510,891.11 |
| Ingham | 11,222 | 17,456 | 17,123 | 25,270 | 29,193 | 33,677 | 333,374.05 | 333,497.00 | 340,468.00 | 341,047.63 | 333,959.39 | 343,333.57 |
| Ionia | 10,727 | 16,665 | 17,984 | 27,676 | 28,376 | 33,872 | 338,095.22 | 343,828.50 | 360,320.52 | 359,153.00 | 359,725.00 | 361,504.23 |
| Iosco | d | 175 | 396 | 3,175 | 4,782 | 6,873 | d | 83,283 30 | 257,337.88 | 418,259.07 | 231,743.72 | 245,870.47 |
| Isabella | d | 1,445 | 1,844 | 4,113 | 6,059 | 12,159 | l | 134,727.00 | 242,777.49 | 224,797.00 | 349,175.00 | 354,086.79 |
| Isle Royal | n | n | ee | ee | ee | 55 | n | ee | ee | ee | No report. | No report. |
| Jackson | 21,855 | 26,664 | 25,905 | 36,042 | 37,988 | 42,031 | 435,677.00 | 432,158.00 | 433,700.00 | 433,259.00 | 433,655.00 | 431,641.60 |
| Kalamazoo | 16,893 | 24,663 | 25,842 | 32,063 | 32,284 | 34,342 | 346,246.00 | 346,255.00 | 340,035.00 | 354,245.00 | 350,605.00 | 349,793.00 |
| Kalkaska | c | c | l | 424 | 1,259 | 2,937 | c | c | l | 137,422.43 | 565,882.51 | 330,705.52 |
| Kent | 17,869 | 30,743 | 33,458 | 50,410 | 62,671 | 73,252 | 506,136.24 | 516,425.00 | 520,401.00 | 525,541.00 | 530,722.28 | 532,885.00 |
| Keweenaw | n | n | 5,180 | 4,209 | 5,415 | 4,270 | n | 118,425.95 | 218,629.38 | 238,306.43 | 191,547.58 | 203,570.23 |
| Lake | w | o | o | 548 | 1,813 | 3,233 | o | o | o | 106,842.73 | 323,956.91 | 344,249.03 |
| Lapeer | 9,704 | 14,875 | 15,247 | 21,845 | 25,140 | 30,138 | 372,869.90 | 392,626.80 | 414,274.14 | 362,475.51 | 412,273 97 | 412,392.00 |
| Leelanaw | c | c | 2,380 | 4,577 | 5,071 | 6,253 | c | c | 60,193.91 | 109,993.46 | 157,484.77 | 183,231.79 |
| Lenawee | 31,148 | 38,497 | 40,202 | 45,503 | 46,084 | 48,348 | | 465,446.00 | 468,382.00 | 467,462.00 | 468,189.00 | 463,636.00 |
| Livingston | 14,185 | 16,629 | 16,186 | 19,417 | 20,320 | 22,251 | 258,004.43 | 365,472.02 | 364,210.00 | 364,492.13 | 366,165 59 | 362,262.00 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mackinac | 1,373 | 1,930 | 1,335 | 1,716 | 1,496 | 2,902 | 3,181.48 | 30,975.77 | 30,487.23 | 73,957.21 | 194,971.00 | 293,151.83 |
| Macomb | 18,114 | 23,112 | 22,404 | 28,050 | 28,305 | 31,627 | 239,270.00 | 295,845.00 | 295,580.00 | 297,341.00 | 299,008.00 | 296,055.00 |
| Manistee | c | 874 | 1,740 | 6,074 | 8,471 | 12,533 | 40,660.94 | 99,043.35 | 138,041.44 | 211,499.01 | 269,348.00 | 312,024.07 |
| Manitou | 702 | 1,043 | | 891 | 657 | 1,334 | | 9,388.00 | 20,989.41 | | 34,466.25 | No report. |
| Marquette | | 2,899 | 3,849 | 15,077 | 21,946 | 25,393 | | | 280,569.48 | 424,383.00 | 1,164,635 61 | 1,503,792.11 |
| Mason | q | 831 | 844 | 2,266 | 5,361 | 10,063 | | 83,261.76 | 101,664.95 | 123,005.07 | 265,188.00 | 285,842.93 |
| Mecosta | r | 1,017 | 1,583 | 5,646 | 9,132 | 18,973 | r | 235,876.28 | 276,464.37 | 256,671.00 | 353,438.26 | 343,773.00 |
| Menominee | s | s | 496 | 1,894 | 3,490 | 11,988 | s | t | 91,981.00 | | 625,120.03 | 722,624.44 |
| Midland | d | 783 | 1,284 | 3,383 | 5,306 | 6,894 | 201,103.79 | 280,090.14 | 449,136.91 | 638,624.00 | 315,626.00 | 322,206.92 |
| Missaukee | c | u | u | dd 130 | 606 | 1,553 | c | u | u | 134,826.90 | 287,838.10 | 326,999.86 |
| Monroe | 18,122 | 21,618 | 22,221 | 27,534 | 30,111 | 33,623 | 330,728.00 | 333,904.00 | 337,326.00 | 336,377.00 | 347,447.81 | 351,314.00 |
| Montcalm | 2,060 | 3,984 | 5,619 | 13,642 | 20,815 | 33,148 | 219,689 00 | 315,742.38 | 350,431.00 | 409,212.00 | 434,493.00 | 446,517.00 |
| Montmorency | a | b | b | b | b | gg | a | b | b | b | b | 239,347.20 |
| Muskegon | v | 3,893 | 5,810 | 14,895 | 19,375 | 26,586 | v | 150,681.14 | 190,715.09 | 223,182.35 | 265,588.28 | 279,236.29 |
| Newaygo | 970 | 2,766 | 3,481 | 7,292 | 8,758 | 14,688 | 201,000.00 | 250,816.26 | 273,218.59 | 388,060.08 | 517,779.00 | 527,704.00 |
| Oakland | 31,884 | 38,020 | 33,725 | 40,906 | 38,082 | 41,537 | 513,904.00 | 539,590.00 | 478,261.39 | 531,841.00 | 536,514.00 | 540,520.00 |
| Oceana | w | 1,802 | 2,379 | 7,222 | 8,360 | 11,699 | 54,428.84 | 166,278.10 | 200,600.65 | 272,238.28 | 324,033.00 | 333,316.29 |
| Ogemaw | a | l | h | bb | bb | 1,914 | a | h | h | bb | 300,571.42 | 319,190.02 |
| Ontonagon | 3,662 | 4,575 | 5,406 | 2,846 | 2,406 | 2,565 | 201,862.54 | 193,009.50 | 191,521.33 | 244,959.60 | 338,610.50 | 739,809.29 |
| Osceola | w | x | x | 2,104 | 6,216 | 10,777 | w | x | x | 156,370.00 | 340,965.76 | 359,177.00 |
| Oscoda | a | b | b | y | y | 467 | a | b | b | y | y | 220,637.60 |
| Otsego | a | b | l | l | l | 1,974 | a | b | l | l | 275,418.26 | 302,486.00 |
| Ottawa | 9,233 | 13,077 | 15,156 | 26,665 | 29,929 | 33,125 | 398,344.46 | 294,025.18 | 314,984 00 | 340,212.91 | 348,647.73 | 341,668.49 |
| Presque Isle | a | b | b | 355 | 1,615 | 3,113 | a | b | b | 88,397.38 | 222,076.56 | 264,910.34 |
| Roscommon | a | l | l | l | l | 1,459 | a | l | l | l | 273,730.59 | 278,023.62 |
| Saginaw | 3,528 | 12,758 | 19,675 | 33,079 | 48,409 | 59,095 | 456,081.03 | 420,679.00 | 457,177.07 | 480,252.35 | 504,679.61 | 507,549.02 |
| Sanilac | | 7,623 | 8,853 | 14,566 | 16,292 | 26,341 | 401,327.26 | 403,292 90 | 497,021.61 | 522,865.00 | 550,587.00 | 595,742.61 |
| Schoolcraft | t | t | t | t | 1,290 | 1,575 | t | t | t | | 636,174.42 | 725,125 41 |
| Shiawassee | 7,419 | 12,888 | 13,465 | 20,864 | 21,773 | 27,059 | 318,547.00 | 341,427.02 | 333,588.77 | 336,296.77 | 337,888.00 | 336,715.27 |
| St. Clair | 16,397 | 26,814 | 27,591 | 36,687 | 40,688 | 46,197 | 395,017.50 | 424,325 00 | 426,446.00 | 431,795.00 | 434,953.61 | 432,461.00 |
| St. Joseph | 15,087 | 21,111 | 21,796 | 26,274 | 25,906 | 26,626 | 311,202.44 | 314,322.73 | 303,531.00 | 312,045.00 | 317,267.00 | 312,365.00 |
| Tuscola | 1,504 | 4,835 | 6,983 | 13,721 | 16,998 | 25,739 | 279,163.34 | 341,245.49 | 333,572.00 | 450,746.00 | 494,580.00 | 501,006.00 |
| Van Buren | 8,000 | 13,230 | 17,820 | 28,735 | 29,156 | 30,807 | 369,406.58 | 331,723.22 | 380,328.00 | 382,521.00 | 388,663.76 | 384,684.21 |
| Washtenaw | 28,836 | 33,757 | 34,050 | 41,442 | 38,723 | 41,848 | 440,931.16 | 429,832.00 | 429,454.00 | 440,591.00 | 436,007.58 | 431,493.19 |
| Wayne | 65,778 | 75,394 | 83,326 | 119,054 | 144,903 | 166,426 | 392,762.00 | 380,714.00 | 371,027.36 | 368,008.00 | 368,398.00 | 368,415.00 |
| Wexford | c | u | u | 650 | 3,011 | 6,815 | u | u | u | 84,792.16 | 319,104.66 | 336,753.80 |
| Totals | | | 803,745 | 1,134,638 | 1,334,031 | 1,636,335 | 12,167,812.84 | 15,162,710.40 | 17,111,716.91 | 20,515,338.03 | 27,605,262.36 | 29,306,820.07 |

(a) Attached to Cheboygan.
(b) Attached to Alpena.
(c) Attached to Grand Traverse.
(d) Attached to Saginaw.
(e) Part of Leelanaw.
(f) Attached to Isabella.
(h) Attached to Iosco.
(i) Attached to Antrim.
(k) Attached to Mackinac.
(l) Attached to Midland.
(m) Attached to Sanilac.
(n) Part of Houghton.
(o) Attached to Mason,
(q) Attached to Oceana.
(r) Attached to Kent.
(s) Part of Delta.
(t) Attached to Marquette.
(u) Attached to Manistee.
(v) Part of Oceana and Ottawa.
(w) Attached to Ottawa.
(x) Attached to Mecosta.
(y) Attached to Alcona.
(bb) Part of Iosco.
(cc) Attached to Kalkaska.
(dd) Attached to Wexford.
(ee) Part of Keweenaw.
(ff) Includes Montmorency.
(gg) Included in Alpena.
* Except Bangor; acres not reported for that township.

# TABLE LXXIX.

*Assessed Valuation for 1853, 1856, 1861, 1866, 1869, 1870, 1871, 1876, and 1881.*

| COUNTIES. | 1853. | 1856. | 1861. | 1866. | 1869. | 1870. | 1871. | 1876. | 1881. |
|---|---|---|---|---|---|---|---|---|---|
| Alcona | a | a | b | b | $1,132,019 62 | $1,174,253 43 | $1,240,235 15 | $2,644,545 03 | $2,492,527 00 |
| Allegan | $1,541,737 43 | $1,704,698 00 | $3,061,876 00 | $3,183,816 00 | 11,806,438 00 | 10,431,687 00 | 9,894,575 00 | 8,559,802 00 | 9,652,330 00 |
| Alpena | a | a | 367,362 78 | 1,299,234 36 | 1,494,280 82 | 1,488,729 92 | 1,484,160 70 | 1,986,000 00 | 3,016,508 50 |
| Antrim | c | c | c | 218,028 53 | 424,045 00 | 460,433 00 | 356,253 00 | 906,883 41 | 2,152,872 11 |
| Baraga | n | n | n | n | n | n | n | 675,466 00 | 689,656 00 |
| Barry | 1,210,484 55 | 1,720,339 00 | 1,757,797 00 | 1,864,958 00 | 6,505,060 00 | 5,587,424 00 | 5,136,767 00 | 4,630,823 00 | 11,332,459 00 |
| Bay | d | d | 697,426 00 | 1,457,708 00 | 2,423,034 20 | 2,679,197 08 | 2,775,699 70 | 3,186,768 05 | 12,901,183 00 |
| Benzie | c | e | e | c | 368,900 78 | 307,418 00 | 449,214 00 | 578,823 00 | 1,205,586 00 |
| Berrien | 3,022,658 00 | 4,215,357 00 | 4,676,268 00 | 4,620,040 00 | 6,208,923 00 | 6,234,094 00 | 6,398,163 00 | 6,276,136 00 | 12,918,434 00 |
| Branch | 3,138,308 00 | 3,796,734 00 | 3,805,903 00 | 4,055,296 00 | 4,343,943 00 | 4,367,038 00 | 4,485,678 00 | 4,635,755 00 | 10,261,965 00 |
| Calhoun | 3,742,270 00 | 5,426,584 00 | 5,681,784 00 | 6,167,774 00 | 7,339,497 00 | 7,215,237 00 | 7,398,145 00 | 7,990,380 00 | 19,527,765 00 |
| Cass | 2,710,660 00 | 3,703,478 00 | 3,813,881 00 | 4,003,755 00 | 4,360,572 00 | 4,269,031 00 | 4,293,820 00 | 4,552,836 00 | 13,667,602 00 |
| Charlevoix | z | c | c | c | 85,770 80 | 93,947 25 | 107,426 41 | 438,239 00 | 1,631,271 00 |
| Cheboygan | k | 89,289 25 | 83,686 20 | 84,128 00 | 410,015 00 | 506,669 00 | 568,698 00 | 1,347,275 00 | 2,761,832 00 |
| Chippewa | | | 111,224 36 | 125,905 00 | 214,451 00 | 220,838 00 | 441,672 00 | 810,840 00 | 1,558,071 00 |
| Clare | d | d | f | f | g | g | 1,020,960 50 | 1,342,337 61 | 2,377,681 00 |
| Clinton | 1,174,323 00 | 2,174,123 00 | 2,406,314 60 | 2,676,817 44 | 3,421,665 00 | 3,610,617 00 | 3,796,253 00 | 4,404,389 00 | 16,631,293 00 |
| Crawford | a | a | h | i | i | i | cc | cc | 935,244 05 |
| Delta | k | k | | | 361,964 00 | 315,000 00 | 337,153 00 | 990,337 39 | No report. |
| Eaton | 1,692,927 00 | 3,135,767 00 | 3,201,910 00 | 3,164,512 00 | 4,397,514 00 | 5,425,721 00 | 5,229,407 00 | 6,640,076 00 | 12,562,796 00 |
| Emmet | k | | 41,102 36 | 61,876 87 | 70,841 50 | 161,914 00 | 75,495 00 | 371,172 57 | 825,893 00 |
| Genesee | 2,980,924 54 | 3,922,987 00 | 4,056,880 00 | 4,387,699 00 | 5,973,857 00 | 6,002,954 00 | 6,160,948 00 | 6,355,549 00 | 19,166,661 00 |
| Gladwin | d | l | l | l | l | l | l | 849,379 00 | 1,022,900 00 |
| Grand Traverse | | | 521,298 00 | 313,287 00 | 1,241,898 00 | 1,159,530 00 | 920,216 00 | 1,617,714 00 | 2,439,964 00 |
| Gratiot | d | 585,847 00 | 737,372 00 | 930,533 00 | 2,812,052 00 | 2,686,474 00 | 2,749,140 00 | 2,813,138 00 | 7,126,921 00 |
| Hillsdale | 4,169,523 76 | 5,171,400 00 | 5,407,782 00 | 6,013,013 00 | 6,636,593 00 | 6,807,502 00 | 6,567,835 00 | 6,849,062 00 | 17,912,619 00 |
| Houghton | | | 1,033,666 72 | 2,047,922 13 | 2,166,646 80 | 1,865,843 00 | 1,338,293 97 | 1,892,328 00 | 1,619,589 00 |
| Huron | m | m | 533,591 16 | 723,024 91 | 1,096,144 50 | 1,181,823 00 | 1,254,771 00 | 1,568,670 00 | 4,561,982 00 |
| Ingham | 1,870,153 00 | 2,894,810 55 | 2,910,247 00 | 3,147,872 00 | 4,170,548 00 | 8,921,812 00 | 8,402,966 00 | 6,747,143 00 | 15,844,318 00 |
| Ionia | 1,938,130 50 | 3,188,605 25 | 3,376,465 25 | 3,922,548 00 | 4,380,278 00 | 4,247,390 00 | 4,144,237 00 | 4,204,142 00 | 15,480,291 00 |
| Iosco | d | d | 129,250 87 | 633,273 81 | 1,356,295 94 | 1,513,409 16 | 1,750,716 50 | 1,144,312 00 | 1,102,791 59 |
| Isabella | d | l | 497,080 00 | 664,445 49 | 1,367,254 20 | 1,296,143 00 | 1,305,154 00 | 1,724,504 00 | 3,691,736 00 |
| Isle Royal | n | n | ee | ee | ee | ee | ee | No report. | No report. |
| Jackson | 5,758,013 00 | 6,528,113 00 | 6,476,813 00 | 6,868,830 00 | 10,883,289 00 | 9,649,886 00 | 9,638,894 00 | 9,460,490 00 | 8,872,448 00 |
| Kalamazoo | 4,787,874 00 | 5,781,582 00 | 4,646,911 00 | 5,576,204 00 | 6,450,773 00 | 10,691,417 00 | 11,071,644 00 | 8,738,545 00 | 18,901,030 00 |
| Kalkaska | c | c | c | i | i | i | 182,254 00 | 2,658,061 00 | 2,475,991 62 |
| Kent | 3,734,440 00 | 6,503,338 18 | 6,357,454 00 | 7,022,318 00 | 8,581,710 00 | 9,844,100 00 | 10,169,203 00 | 19,407,162 00 | 18,016,252 00 |
| Keweenaw | n | n | 771,032 02 | 1,703,846 20 | 1,122,915 69 | 1,122,915 69 | 807,020 00 | 967,897 45 | 619,263 13 |
| Lake | w | o | o | o | p | p | 560,708 00 | 1,416,701 80 | 1,921,042 00 |
| Lapeer | 1,771,019 33 | 2,236,841 00 | 2,286,622 00 | 2,268,082 00 | 2,872,202 00 | 2,888,225 00 | 2,741,186 00 | 3,699,457 00 | 12,136,504 00 |
| Leelanaw | c | c | c | 227,554 00 | 414,431 00 | 454,321 00 | 492,541 07 | 575,884 00 | 693,971 00 |
| Lenawee | 9,590,431 00 | 10,674,746 00 | 10,360,157 00 | 10,724,100 00 | 11,021,848 00 | 10,554,663 00 | 11,196,462 00 | 11,419,747 00 | 26,837,269 00 |
| Livingston | 2,738,576 86 | 3,296,369 75 | 3,156,530 00 | 3,245,041 00 | 3,480,600 00 | 3,496,541 00 | 3,548,385 00 | 7,098,841 00 | 12,355,417 00 |
| Mackinac | 169,902 25 | 154,331 00 | 147,785 00 | 237,917 15 | 337,098 75 | 410,934 75 | 492,541 31 | 833,642 00 | 1,403,955 71 |
| Macomb | 4,866,399 00 | 5,296,466 00 | 4,899,459 00 | 5,193,249 00 | 5,864,072 00 | 5,802,255 00 | 6,032,737 00 | 6,380,165 00 | 16,010,686 00 |
| Manistee | c | | 338,062 62 | 612,826 91 | 1,102,865 78 | 1,136,284 68 | 1,203,405 00 | 1,458,492 19 | 1,686,782 00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Manitou | k | | 62,177 00 | 117,306 00 | 113,551 00 | 113,551 00 | | 103,501 00 | No report. |
| Marquette | | | | 1,189,989 00 | 2,698,522 00 | 3,175,065 00 | 2,756,768 00 | 3,061,123 50 | 3,121,480 00 |
| Mason | q | | 212,897 40 | 239,188 42 | 427,997 08 | 937,724 32 | 812,036 93 | 1,181,608 90 | 3,165,244 80 |
| Mecosta | r | r | 342,410 15 | 769,954 10 | 2,416,428 59 | 2,391,636 53 | 2,186,258 00 | 2,629,187 00 | 2,868,075 80 |
| Menominee | s | s | | 241,728 00 | 541,650 03 | 539,474 89 | | 1,363,319 83 | 1,757,862 25 |
| Midland | d | 560,600 66 | 583,520 76 | 1,326,243 00 | 3,007,608 00 | 3,108,568 00 | 2,431,168 00 | 899,692 00 | 2,113,221 00 |
| Missaukee | c | c | w | w | dd | dd | 497,169 43 | 1,262,220 35 | 1,519,558 44 |
| Monroe | 3,813,595 00 | 4,236,159 00 | 4,071,835 00 | 4,281,928 00 | 4,558,767 00 | 4,427,307 00 | 4,366,008 00 | 4,819,235 00 | 14,952,990 00 |
| Montcalm | 265,422 00 | 293,580 00 | 1,037,162 00 | 1,230,491 00 | 1,527,449 00 | 1,973,142 00 | 2,014,966 00 | 4,294,979 00 | 9,856,171 00 |
| Montmorency | a | a | b | b | b | b | b | b | 1,211,247 00 |
| Muskegon | v | v | 793,884 52 | 1,634,747 72 | 2,946,818 00 | 3,237,212 00 | 3,345,814 00 | 3,412,245 00 | 3,586,559 00 |
| Newaygo | 153,928 75 | 702,286 00 | 703,911 00 | 949,174 00 | 1,519,644 00 | 1,928,247 00 | 2,083,461 49 | 2,415,062 00 | 2,508,083 00 |
| Oakland | 8,618,290 00 | 10,266,760 00 | 9,689,543 00 | 9,066,705 00 | 9,579,819 00 | 9,601,435 00 | 9,659,855 00 | 9,635,773 00 | 24,432,277 00 |
| Oceana | w | 209,292 52 | 427,054 59 | 575,690 60 | 1,074,802 41 | 1,420,784 07 | 1,731,155 28 | 1,680,201 00 | 1,736,393 00 |
| Ogemaw | a | a | h | h | bb | bb | bb | 788,962 51 | 905,693 01 |
| Ontonagon | aa | | 1,132,329 00 | 865,128 58 | 1,035,121 00 | 971,803 00 | 710,299 00 | 942,977 00 | 1,414,972 00 |
| Osceola | w | w | x | x | 985,895 94 | 1,065,978 00 | 816,400 00 | 1,845,486 00 | 1,897,220 00 |
| Oscoda | a | a | b | b | | | | | 749,468 00 |
| Otsego | a | a | b | i | y | y | y | y | 651,759 00 |
| Ottawa | 1,239,114 25 | 2,363,729 21 | 1,353,723 00 | 1,870,761 00 | 2,333,454 00 | 2,257,368 00 | 2,260,387 00 | 5,308,328 00 | 6,833,067 00 |
| Presque Isle | a | a | b | b | b | b | 845,771 24 | 925,998 65 | 1,029,825 99 |
| Roscommon | a | a | l | l | l | l | l | 782,259 00 | 1,175,732 14 |
| Saginaw | 1,327,393 49 | 2,520,803 86 | 2,480,487 60 | 3,487,419 55 | 4,688,809 00 | 8,298,663 00 | 8,502,049 00 | 8,035,072 00 | 20,914,101 00 |
| Sanilac | 776,657 00 | 1,729,033 87 | 1,520,274 14 | 1,578,501 00 | 1,803,594 00 | 3,409,275 00 | 3,119,459 00 | 3,109,686 00 | 3,899,273 00 |
| Schoolcraft | t | t | t | t | t | t | | 832,649 10 | 2,481,034 41 |
| Shiawassee | 1,155,017 00 | 2,229,656 00 | 2,672,644 00 | 2,248,774 00 | 2,431,648 00 | 2,462,142 00 | 2,513,867 50 | 2,632,764 00 | 11,937,044 00 |
| St. Clair | 3,325,076 02 | 3,753,860 00 | 3,607,428 00 | 3,783,919 00 | 4,000,941 00 | 5,747,537 00 | 4,363,647 00 | 4,601,025 00 | 13,653,363 00 |
| St. Joseph | 4,104,713 00 | 5,273,170 00 | 5,800,059 00 | 6,395,603 00 | 15,316,083 00 | 12,721,564 00 | 12,924,365 00 | 8,302,436 00 | 15,994,663 00 |
| Tuscola | 281,122 43 | 927,026 79 | 1,118,891 69 | 1,406,023 00 | 1,808,020 00 | 1,867,621 00 | 1,821,155 00 | 2,160,790 00 | 7,712,647 00 |
| Van Buren | 1,482,757 79 | 2,402,243 75 | 2,587,654 00 | 3,415,697 00 | 11,106,330 00 | 9,935,634 00 | 7,170,713 00 | 9,094,458 00 | 12,697,438 00 |
| Washtenaw | 9,012,392 00 | 9,194,680 00 | 9,253,558 00 | 9,747,064 00 | 10,837,845 00 | 10,866,340 00 | 11,293,259 00 | 10,827,545 00 | 29,024,665 00 |
| Wayne | 17,953,525 00 | 20,236,936 00 | 20,010,220 00 | 23,245,285 00 | 27,515,229 00 | 27,291,620 00 | 24,662,718 00 | 103,563,242 00 | 110,693,130 00 |
| Wexford | c | u | u | u | 941,279 03 | 795,909 72 | 498,861 86 | 1,295,545 89 | 1,935,864 00 |
| Totals | $115,647,758 95 | $149,749,623 41 | $157,863,206 69 | $179,065,450 86 | $253,869,606 96 | $266,929,278 49 | $261,096,705 04 | $374,841,031 23 | $669,344,283 55 |

(a) Attached to Cheboygan.
(b) Attached to Alpena.
(c) Attached to Grand Traverse.
(d) Attached to Saginaw.
(e) Part of Leelanaw.
(f) Attached to Isabella.
(g) E ½ attached to Midland, W ½ to Mecosta.
(h) Attached to Iosco.
(i) Attached to Antrim.
(k) Attached to Mackinac.
(l) Attached to Midland.
(m) Attached to Sanilac.
(n) Part of Houghton.
(o) Attached to Mason.
(p) E ½ attached to Osceola, W ½ to Mason.
(q) Attached to Oceana.
(r) Attached to Kent.
(s) Part of Delta.
(t) Attached to Marquette.
(u) Attached to Manistee.
(v) Part of Oceana and Ottawa.
(w) Attached to Ottawa.
(x) Attached to Mecosta.
(y) Attached to Alcona.
(z) Attached to Emmet.
(aa) Attached to Houghton.
(bb) Is part of Iosco.
(cc) Attached to Kalkaska.
(dd) Attached to Wexford.
(ee) Part of Keweenaw.

# TABLE LXXX.

*Valuation of Taxable Property as Equalized by Boards of Supervisors for 1851, 1853, 1856, 1861, 1866, 1871, 1876, and 1881.*

| COUNTIES. | 1851. | 1853. | 1856. | 1861. | 1866. | 1871. | 1876. | 1881. |
|---|---|---|---|---|---|---|---|---|
| Alcona | k | a | a | b | b | $1,240,235 15 | $2,644,545 03 | $2,492,527 00 |
| Allegan | $651,570 35 | $1,541,737 43 | $2,704,798 00 | $2,998,876 00 | $3,077,307 00 | 8,133,920 00 | 7,193,421 00 | 9,303,500 00 |
| Alpena | k | a | a | 367,362 78 | 1,299,234 33 | 1,384,160 70 | 1,715,000 00 | 2,500,000 00 |
| Antrim | k | c | c | c | 208,636 61 | 355,857 00 | 910,684 41 | 2,237,682 25 |
| Baraga | n | n | n | n | n | n | 675,466 00 | 639,656 00 |
| Barry | 409,769 00 | 1,224,587 95 | 1,710,948 00 | 1,743,612 00 | 1,857,815 00 | 4,403,913 00 | 4,690,388 00 | 11,305,291 00 |
| Bay | d | d | d | 635,309 00 | 1,448,790 00 | 2,623,457 00 | 3,168,000 00 | 11,000,000 00 |
| Benzie | o | e | c | e | c | 481,052 00 | 578,823 00 | 1,021,494 00 |
| Berrien | 875,749 50 | 3,060,883 55 | 4,426,061 90 | 4,222,042 00 | 5,257,735 00 | 6,364,583 00 | 6,467,382 00 | 13,041,937 00 |
| Branch | 786,187 00 | 2,874,354 00 | 3,799,317 00 | 3,802,948 00 | 4,038,260 00 | 4,555,393 00 | 4,650,000 00 | 10,155,000 00 |
| Calhoun | 1,637,347 00 | 3,646,946 00 | 5,426,584 00 | 5,819,358 00 | 6,167,774 00 | 7,998,719 00 | 8,315,438 35 | 20,504,153 25 |
| Cass | 841,411 00 | 2,700,660 00 | 3,703,478 00 | 3,813,881 00 | 3,938,000 00 | 4,492,000 00 | 4,660,000 00 | 14,280,000 00 |
| Charlevoix | k | z | c | c | c | 106,824 00 | 438,239 00 | 1,633,851 00 |
| Cheboygan | k | k | 90,115 00 | 77,225 20 | 79,128 00 | 560,198 00 | 1,218,600 00 | 2,701,000 00 |
| Chippewa | * 70,194 00 | | | 111,224 36 | 125,905 00 | 442,122 50 | 810,840 00 | 1,558,071 00 |
| Clare | d | d | d | f | f | 982,275 50 | 1,041,564 43 | 1,889,078 00 |
| Clinton | 510,377 00 | 1,164,959 00 | 2,180,123 00 | 1,977,538 00 | 2,676,817 44 | 4,327,418 00 | 4,727,000 00 | 15,298,500 00 |
| Crawford | k | a | a | h | l | cc | cc | 925,940 35 |
| Delta | k | k | k | | | 337,153 00 | 1,050,831 83 | No report. |
| Eaton | 571,004 96 | 1,732,854 00 | 2,778,123 00 | 3,046,328 00 | 3,092,860 00 | 5,531,598 93 | 7,016,481 00 | 12,000,000 00 |
| Emmet | k | k | | 41,102 36 | 62,790 12 | 74,066 46 | 371,172 57 | 836,393 00 |
| Genesee | 735,209 23 | 2,548,036 54 | 4,008,499 00 | 4,052,298 00 | 4,464,737 00 | 6,122,976 00 | 6,382,436 00 | 19,115,427 71 |
| Gladwin | d | d | l | l | l | l | 849,379 00 | 1,059,095 00 |
| Grand Traverse | | | | 498,459 00 | 311,723 00 | 919,766 00 | 1,617,714 00 | 2,525,875 00 |
| Gratiot | d | d | 474,191 00 | 595,711 00 | 711,259 00 | 2,065,749 00 | 2,697,350 00 | 3,500,000 00 |
| Hillsdale | 801,000 00 | 4,167,225 76 | 5,162,400 00 | 5,252,637 00 | 5,791,041 00 | 6,514,769 00 | 6,397,578 00 | 18,013,234 00 |
| Houghton | | | | 1,033,666 72 | 1,865,000 00 | 1,338,293 97 | 1,392,328 00 | 1,619,589 00 |
| Huron | m | m | m | 466,865 00 | 737,610 61 | 1,276,987 00 | 1,567,690 00 | 4,661,982 00 |
| Ingham | 692,219 99 | 1,833,000 00 | 2,925,811 55 | 2,748,990 00 | 2,863,000 00 | 6,059,533 00 | 5,000,000 00 | 10,942,200 00 |
| Ionia | 515,993 67 | 2,007,218 87 | 3,144,528 00 | 3,356,875 25 | 3,965,370 00 | 4,205,831 00 | 4,309,308 00 | 14,930,751 00 |
| Iosco | k | d | d | 129,250 37 | 633,273 81 | 1,750,716 50 | 984,000 00 | 1,162,000 00 |
| Isabella | d | d | l | 457,080 00 | 535,426 61 | 1,309,496 00 | 1,712,000 00 | 3,100,000 00 |
| Isle Royal | n | n | n | cc | cc | cc | No report. | No report. |
| Jackson | 1,516,459 01 | 5,723,798 00 | 6,199,925 00 | 5,034,559 00 | 6,067,086 00 | 10,741,550 00 | 11,361,890 00 | 9,256,301 00 |
| Kalamazoo | 892,402 00 | 4,810,655 00 | 5,619,229 00 | 4,689,662 00 | 5,619,443 00 | 11,523,570 00 | 8,104,260 00 | 19,084,537 00 |
| Kalkaska | k | c | c | c | l | 182,254 00 | 2,505,332 00 | 2,480,307 00 |
| Kent | 986,608 68 | 3,562,823 00 | 6,557,737 50 | 6,431,679 00 | 6,733,968 00 | 9,505,187 00 | 19,407,161 00 | 18,013,210 00 |
| Keweenaw | n | n | n | 771,032 02 | 1,409,700 20 | 857,852 00 | 1,151,179 68 | 738,199 13 |
| Lake | w | w | o | o | o | 560,708 00 | 1,416,701 80 | 1,826,202 00 |
| Lapeer | 406,400 88 | 1,666,118 59 | 2,199,141 00 | 2,137,307 00 | 2,216,010 00 | 2,780,000 00 | 3,343,000 00 | 12,135,000 00 |
| Leelanaw | k | c | c | c | 231,564 00 | 487,581 07 | 615,884 00 | 774,034 00 |
| Lenawee | 2,563,108 50 | 9,609,813 00 | 10,536,619 00 | 10,288,929 00 | 10,286,178 00 | 11,093,596 00 | 11,406,283 00 | 27,045,964 00 |
| Livingston | 607,283 61 | 3,278,626 97 | 3,238,357 00 | 3,155,430 00 | 2,875,891 00 | 3,846,395 00 | 8,420,841 00 | 9,338,410 00 |
| Mackinac | † 170,279 60 | 169,902 25 | 165,599 00 | 147,785 00 | 237,917 15 | 462,511 31 | 833,643 00 | 1,403,955 71 |
| Macomb | 898,246 00 | 4,510,309 00 | 5,296,466 00 | 4,809,950 00 | 5,279,249 00 | 6,077,737 00 | 6,273,000 00 | 16,000,000 00 |
| Manistee | q | c | 221,531 44 | 835,662 62 | 612,826 91 | 1,206,446 00 | 1,458,392 19 | 1,691,250 00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Manitou | k | k | | 62,177 00 | 117,306 00 | | 102,959 20 | No report. |
| Marquette | | | | | 1,128,794 00 | 2,756,768 00 | 3,067,175 00 | 2,904,940 00 |
| Mason | q | q | | 178,133 82 | 238,889 00 | 793,122 82 | 1,180,358 90 | 3,165,244 80 |
| Mecosta | r | r | r | 342,410 15 | 775,040 50 | 2,186,258 00 | 2,510,483 00 | 3,047,933 80 |
| Menominee | s | s | s | | 241,728 00 | | 1,363,319 83 | 1,757,862 25 |
| Midland | d | d | 569,514 80 | 572,385 96 | 1,326,243 00 | 2,382,174 00 | 1,062,750 00 | 2,009,863 00 |
| Missaukee | k | c | c | u | u | 497,169 43 | 1,262,220 35 | 1,537,558 44 |
| Monroe | 960,344 22 | 3,811,875 00 | 4,199,570 00 | 4,061,388 00 | 4,271,610 55 | 4,407,941 00 | 4,869,893 00 | 15,213,276 50 |
| Montcalm | 83,986 58 | 291,645 00 | 893,580 00 | 1,037,107 00 | 1,175,231 00 | 1,779,809 00 | 4,572,454 00 | 8,490,000 00 |
| Montmorency | k | a | a | b | b | b | b | 1,202,873 00 |
| Muskegon | v | v | v | 860,524 12 | 1,623,689 39 | 3,338,018 95 | 3,383,938 20 | 3,320,102 25 |
| Newaygo | | 153,928 75 | 647,225 00 | 675,412 00 | 948,265 18 | 1,555,000 00 | 1,796,000 00 | 2,146,292 00 |
| Oakland | 2,239,836 00 | 8,617,930 00 | 10,266,760 00 | 9,689,543 00 | 9,066,705 00 | 9,730,855 00 | 9,655,773 00 | 23,505,277 00 |
| Oceana | w | w | 232,994 62 | 424,943 95 | 610,861 13 | 1,997,211 57 | 1,536,919 33 | 1,775,593 00 |
| Ogemaw | k | a | a | h | h | bb | 788,010 00 | 1,116,933 32 |
| Ontonagon | aa | aa | 511,169 88 | 1,132,329 00 | 677,457 58 | 500,268 00 | 695,000 00 | 1,021,558 00 |
| Osceola | w | w | w | x | x | 839,198 00 | 2,048,614 00 | 1,907,220 00 |
| Oscoda | k | a | a | b | b | y | y | 749,468 00 |
| Otsego | k | a | a | b | i | i | 651,759 00 | 1,119,948 00 |
| Ottawa | 566,879 09 | 1,322,479 70 | 2,438,487 15 | 1,374,317 00 | 1,832,122 00 | 2,240,280 00 | 6,558,687 00 | 6,316,619 00 |
| Presque Isle | k | a | a | b | b | 238,943 45 | 925,998 65 | 1,029,825 99 |
| Roscommon | k | a | a | l | l | l | 782,259 00 | 1,076,132 14 |
| Saginaw | 559,332 85 | 1,336,002 22 | 2,511,121 62 | 2,250,424 63 | 3,875,575 67 | 8,702,730 29 | 8,182,798 42 | 19,936,030 03 |
| Sanilac | 221,225 19 | 776,657 00 | 1,740,864 44 | 1,513,158 34 | 1,532,984 00 | 3,440,989 00 | 3,121,891 00 | 3,906,254 00 |
| Schoolcraft | t | t | t | t | t | 577,845 00 | 832,649 10 | 1,934,705 00 |
| Shiawassee | 336,541 31 | 1,280,488 00 | 2,460,248 00 | 2,466,282 00 | 2,119,565 00 | 2,420,300 00 | 4,199,500 00 | 11,010,000 00 |
| St. Clair | 977,261 25 | 3,052,532 39 | 3,767,672 15 | 3,575,391 00 | 3,783,919 00 | 4,331,647 00 | 4,679,481 00 | 11,141,078 00 |
| St. Joseph | 1,088,920 00 | 4,116,975 00 | 5,412,958 60 | 5,825,565 00 | 6,343,536 00 | 12,753,118 00 | 8,074,880 00 | 16,103,848 00 |
| Tuscola | 88,653 53 | 278,157 93 | 922,094 45 | 930,709 42 | 1,433,593 00 | 1,864,437 00 | 2,156,728 00 | 8,156,358 00 |
| Van Buren | 544,663 35 | 1,683,561 14 | 2,395,925 94 | 2,365,650 00 | 3,025,000 00 | 4,554,000 00 | 8,000,000 00 | 12,000,000 00 |
| Washtenaw | 2,517,427 00 | 9,375,000 00 | 9,000,000 00 | 8,900,000 00 | 10,000,000 00 | 11,325,208 00 | 9,000,000 00 | 30,000,000 00 |
| Wayne | 3,549,272 00 | 16,097,331 30 | 19,148,481 00 | 18,582,982 00 | 23,239,561 00 | 23,493,101 00 | 117,026,685 00 | 117,839,593 00 |
| Wexford | k | c | u | u | u | 498,861 86 | 1,236,692 43 | 1,822,901 50 |
| Totals | $31,485,092 74 | $114,049,162 34 | $149,688,200 44 | $151,871,992 07 | $176,209,042 82 | $254,509,737 46 | $386,877,102 70 | $654,005,885 42 |

(a) Attached to Cheboygan.
(b) Attached to Alpena.
(c) Attached to Grand Traverse.
(d) Attached to Saginaw.
(e) Part of Leelanaw
(f) Attached to Isabella.
(h) Attached to Iosco.
(i) Attached to Antrim.

(k) Attached to Mackinac.
(l) Attached to Midland.
(m) Attached to Sanilac.
(n) Part of Houghton.
(o) Attached to Mason.
(q) Attached to Oceana.
(r) Attached to Kent.

(s) Part of Delta
(t) Attached to Marquette.
(u) Attached to Manistee.
(v) Part of Oceana and Ottawa.
(w) Attached to Ottawa.
(x) Attached to Mecosta.
(y) Attached to Alcona.

(z) Attached to Emmet.
(aa) Attached to Houghton.
(bb) Is part of Iosco.
(cc) Attached to Kalkaska.
(ee) Part of Keweenaw.
* Returns for 1850.
† Returns for 1849.

# TABLE LXXXI.

*Valuation as equalized by State Board of Equalization for 1851, 1853, 1856, 1861, 1866, 1871, 1876, and 1881.*

| COUNTIES. | 1851. | 1853. | 1856. | 1861. | 1866. | 1871. | 1876. | 1881. |
|---|---|---|---|---|---|---|---|---|
| Alcona | k | a | a | b | b | $2,100,000 00 | $1,950,000 00 | $2,500,000 00 |
| Allegan | $188,677 99 | $1,341,737 43 | $2,507,271 00 | $2,980,325 00 | $5,911,781 66 | 13,120,000 00 | 13,000,000 00 | 13,500,000 00 |
| Alpena | k | a | a | 367,362 78 | 1,747,848 32 | 910,000 00 | 1,500,000 00 | 3,100,000 00 |
| Antrim | k | c | c | c | 564,428 32 | 810,000 00 | 900,000 00 | 2,500,000 00 |
| Baraga | n | n | n | n | n | n | 800,000 00 | 1,300,000 00 |
| Barry | 409,769 00 | 1,224,587 95 | 1,780,000 00 | 2,140,720 00 | 3,387,808 32 | 9,450,000 00 | 10,000,000 00 | 13,000,000 00 |
| Bay | d | d | d | 675,862 00 | 2,501,988 32 | 7,350,000 00 | 7,000,000 00 | 18,000,000 00 |
| Benzie | e | e | e | e | e | 440,000 00 | 550,000 00 | 1,500,000 00 |
| Berrien | 775,038 31 | 3,060,883 55 | 3,939,195 00 | 4,545,862 00 | 8,101,461 66 | 16,430,000 00 | 16,025,000 00 | 15,000,000 00 |
| Branch | 837,289 15 | 3,738,308 00 | 3,826,393 00 | 4,902,948 00 | 6,999,973 32 | 15,220,000 00 | 17,500,000 00 | 17,500,000 00 |
| Calhoun | 1,637,347 00 | 5,430,704 00 | 5,452,660 00 | 7,083,900 00 | 12,358,668 32 | 21,000,000 00 | 24,000,000 00 | 24,500,000 00 |
| Cass | 841,411 00 | 2,944,938 00 | 3,296,096 00 | 3,913,881 00 | 7,079,051 66 | 16,430,000 00 | 15,000,000 00 | 15,500,000 00 |
| Charlevoix | k | z | e | e | e | 160,000 00 | 450,000 00 | 2,000,000 00 |
| Cheboygan | k | k | 80,203 00 | 77,225 20 | 152,861 66 | 450,000 00 | 1,200,000 00 | 3,000,000 00 |
| Chippewa | 105,291 00 | 200,000 00 | 100,000 00 | 100,000 00 | 168,455 00 | 450,000 00 | 800,000 00 | 2,000,000 00 |
| Clare | d | d | d | f | f | 890,000 00 | 1,000,000 00 | 2,500,000 00 |
| Clinton | 382,783 00 | 1,164,959 00 | 1,940,310 00 | 2,363,340 00 | 4,197,218 32 | 9,450,000 00 | 9,500,000 00 | 16,000,000 00 |
| Crawford | k | a | a | h | i | cc | cc | 1,200,000 00 |
| Delta | k | k | k | 150,000 00 | 256,650 00 | 450,000 00 | 800,000 00 | 2,500,000 00 |
| Eaton | 519,614 52 | 1,732,854 00 | 2,225,000 00 | 2,793,315 00 | 4,467,860 00 | 11,230,000 00 | 11,150,000 00 | 16,000,000 00 |
| Emmet | k | k | 50,000 00 | 41,102 36 | 116,771 66 | 100,000 00 | 300,000 00 | 2,000,000 00 |
| Genesee | 735,209 23 | 3,114,356 00 | 4,013,455 00 | 4,025,930 00 | 7,746,278 32 | 17,850,000 00 | 16,850,000 00 | 21,000,000 00 |
| Gladwin | d | d | l | l | l | l | 800,000 00 | 1,200,000 00 |
| Grand Traverse | | | 100,000 00 | 548,459 00 | 699,101 66 | 1,360,000 00 | 1,500,000 00 | 3,000,000 00 |
| Gratiot | d | d | 356,000 00 | 607,861 00 | 1,634,745 00 | 2,620,000 00 | 2,500,000 00 | 7,000,000 00 |
| Hillsdale | 993,240 00 | 4,009,523 00 | 4,594,536 00 | 6,246,851 00 | 9,003,886 66 | 20,160,000 00 | 20,025,000 00 | 21,000,000 00 |
| Houghton | | | 300,000 00 | 1,000,430 00 | 3,242,528 32 | 2,100,000 00 | 1,100,000 00 | 2,500,000 00 |
| Huron | m | m | m | 545,810 00 | 1,310,776 66 | 3,330,000 00 | 2,500,000 00 | 5,000,000 00 |
| Ingham | 538,387 00 | 1,853,000 00 | 2,314,000 00 | 2,748,990 00 | 4,469,960 00 | 13,550,000 00 | 13,000,000 00 | 16,000,000 00 |
| Ionia | 515,993 67 | 2,007,218 87 | 2,314,000 00 | 3,040,519 00 | 6,807,948 32 | 14,170,000 00 | 14,000,000 00 | 16,000,000 00 |
| Iosco | k | d | d | 129,250 37 | 1,144,123 32 | 3,150,000 00 | 1,000,000 00 | 2,000,000 00 |
| Isabella | d | d | l | 383,660 00 | 1,071,825 00 | 1,490,000 00 | 1,000,000 00 | 4,000,000 00 |
| Isle Royal | n | n | n | ee | ee | ee | 100,000 00 | 100,000 00 |
| Jackson | 1,316,459 01 | 5,723,798 00 | 5,517,034 00 | 7,052,680 00 | 12,718,571 66 | 26,250,000 00 | 26,250,000 00 | 27,000,000 00 |
| Kalamazoo | 1,093,192 45 | 4,810,655 00 | 5,001,114 00 | 5,789,662 00 | 9,976,346 66 | 25,200,000 00 | 23,000,000 00 | 23,000,000 00 |
| Kalkaska | k | e | e | e | l | 310,000 00 | 1,500,000 00 | 2,500,000 00 |
| Kent | 883,014 78 | 3,582,823 00 | 5,836,386 00 | 8,196,288 00 | 11,833,645 00 | 31,000,000 00 | 31,000,000 00 | 33,000,000 00 |
| Keweenaw | n | n | n | 771,032 02 | 2,512,173 32 | 1,570,000 00 | 800,000 00 | 800,000 00 |
| Lake | w | w | o | o | o | 520,000 00 | 1,000,000 00 | 2,000,000 00 |
| Lapeer | 406,400 88 | 1,666,118 59 | 1,957,236 00 | 2,137,307 00 | 4,715,781 66 | 6,300,000 00 | 6,250,000 00 | 13,000,000 00 |
| Leelanaw | k | e | e | e | 330,011 66 | 520,000 00 | 600,000 00 | 1,000,000 00 |
| Lenawee | 2,358,050 82 | 9,609,813 00 | 9,277,591 00 | 11,360,040 00 | 17,589,248 32 | 26,250,000 80 | 27,000,000 00 | 27,500,000 00 |
| Livingston | 807,687 20 | 3,078,626 97 | 2,882,138 00 | 3,000,200 00 | 6,264,435 00 | 11,500,000 00 | 14,000,000 00 | 15,000,000 00 |
| Mackinac | 127,709 70 | 169,902 25 | 147,384 00 | 147,766 00 | 378,625 00 | 450,000 00 | 800,000 00 | 2,500,000 00 |
| Macomb | 890,246 00 | 4,010,309 00 | 4,713,955 00 | 4,809,955 00 | 8,610,183 32 | 16,900,000 00 | 14,050,000 00 | 15,000,000 00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Manistee | q | | 197,163 00 | 335,682 62 | 813,258 32 | 2,460,000 00 | 2,000,000 00 | 3,540,000 00 |
| Manitou | k | k | 25,000 00 | 62,177 00 | 150,521 66 | 100,000 00 | 100,000 00 | 250,000 00 |
| Marquette | | | 325,000 00 | 1,000,000 00 | 2,247,405 00 | 3,990,000 00 | 4,000,000 00 | 5,000,000 00 |
| Mason | q | q | 50,000 00 | 253,871 00 | 485,975 00 | 1,050,000 00 | 2,000,000 00 | 3,000,000 00 |
| Mecosta | r | r | | 472,500 00 | 1,213,475 00 | 2,520,000 00 | 2,500,000 00 | 3,500,000 00 |
| Menominee | s | s | s | 154,000 00 | 410,260 00 | 1,570,000 00 | 1,500,000 00 | 2,590,000 00 |
| Midland | d | d | 506,868 00 | 583,520 00 | 1,881,231 66 | 3,151,000 00 | 1,500,000 00 | 3,000,000 00 |
| Missaukee | k | c | c | u | u | 450,000 00 | 1,025,000 00 | 1,800,000 00 |
| Monroe | 960,344 22 | 3,811,875 00 | 3,737,618 00 | 4,261,383 00 | 6,901,801 66 | 9,450,000 00 | 9,500,000 00 | 16,000,000 00 |
| Montcalm | 109,182 55 | 291,645 00 | 795,283 00 | 937,107 00 | 2,040,836 66 | 4,950,000 00 | 4,500,000 00 | 9,500,000 00 |
| Montmorency | k | a | a | b | b | b | b | 1,250,000 00 |
| Muskegon | v | v | v | 860,524 12 | 2,643,106 66 | 5,250,000 00 | 4,000,000 00 | 6,500,000 00 |
| Newaygo | | 153,928 75 | 576,031 00 | 775,412 00 | 1,580,441 66 | 2,100,000 00 | 2,200,000 00 | 4,000,000 00 |
| Oakland | 2,441,475 74 | 8,617,930 00 | 9,137,417 00 | 11,223,220 00 | 15,388,560 00 | 26,250,000 00 | 26,250,000 00 | 26,250,000 00 |
| Oceana | w | w | 207,366 00 | 362,000 00 | 964,340 00 | 3,150,000 00 | 2,500,000 00 | 3,000,000 00 |
| Ogemaw | k | a | a | h | h | bb | 800,000 00 | 1,500,000 00 |
| Ontonagon | aa | aa | 534,000 00 | 653,322 00 | 1,421,335 00 | 1,310,000 00 | 700,000 00 | 2,000,000 00 |
| Osceola | w | w | w | x | x | 890,000 00 | 2,000,000 00 | 2,500,000 00 |
| Oscoda | k | a | a | b | b | y | y | 1,000,000 00 |
| Otsego | k | a | a | b | l | l | 650,000 00 | 1,500,000 00 |
| Ottawa | 481,847 23 | 1,322,479 70 | 2,170,209 00 | 1,876,820 00 | 3,503,193 32 | 8,400,000 00 | 7,500,000 00 | 8,500,000 00 |
| Presque Isle | k | a | a | b | b | 450,000 00 | 750,000 00 | 1,250,000 00 |
| Roscommon | k | a | a | b | l | l | 750,000 00 | 1,500,000 00 |
| Saginaw | 357,973 01 | 1,336,002 22 | 2,234,898 00 | 2,493,660 00 | 8,459,291 66 | 16,870,000 00 | 16,000,000 00 | 25,000,000 00 |
| Sanilac | 221,225 19 | 776,657 00 | 1,548,925 00 | 1,491,808 00 | 2,478,403 32 | 3,520,000 00 | 3,050,000 00 | 5,000,000 00 |
| Schoolcraft | t | t | t | t | t | 520,000 00 | 800,000 00 | 2,500,000 00 |
| Shiawassee | 411,666 49 | 1,280,488 00 | 2,189,621 80 | 2,566,382 00 | 3,787,351 66 | 9,240,000 00 | 9,250,000 00 | 13,500,000 00 |
| St. Clair | 977,261 25 | 3,909,044 00 | 3,353,229 00 | 3,996,840 00 | 6,306,531 66 | 7,350,000 00 | 8,250,000 00 | 15,000,000 00 |
| St. Joseph | 1,088,920 00 | 4,116,975 00 | 4,450,000 00 | 5,825,565 00 | 9,229,741 66 | 24,300,000 00 | 18,025,000 00 | 18,000,000 00 |
| Tuscola | 115,249 58 | 278,157 93 | 820,664 00 | 930,709 42 | 2,422,453 32 | 4,040,000 00 | 4,000,000 00 | 9,000,000 00 |
| Van Buren | 541,663 35 | 1,683,561 14 | 2,182,374 00 | 2,591,490 00 | 4,926,238 32 | 11,550,000 00 | 11,000,000 00 | 14,000,000 00 |
| Washtenaw | 2,517,427 00 | 9,375,000 00 | 8,900,000 00 | 10,160,430 00 | 17,189,765 00 | 31,500,000 00 | 30,000,000 00 | 30,000,000 04 |
| Wayne | 3,833,213 76 | 18,953,525 00 | 19,148,481 00 | 23,503,940 00 | 41,371,718 32 | 90,000,000 00 | 97,250,000 00 | 130,000,000 00 |
| Wexford | k | c | u | u | n | 540,000 00 | 1,000,000 00 | 3,000,000 00 |
| Totals | $30,976,270 08 | $120,362,474 35 | $137,663,009 00 | $172,055,868 89 | $307,965,842 92 | $630,000,000 00 | $630,000,000 00 | $810,000,000 00 |

(a) Attached to Cheboygan.
(b) Attached to Alpena.
(c) Attached to Grand Traverse.
(d) Attached to Saginaw.
(e) Part of Leelanaw.
(f) Attached to Isabella.
(h) Attached to Iosco.
(i) Attached to Antrim.
(k) Attached to Mackinac.
(l) Attached to Midland.
(m) Attached to Sanilac.
(n) Part of Houghton.
(o) Attached to Mason.
(q) Attached to Oceana.
(r) Attached to Kent.
(s) Part of Delta.
(t) Attached to Marquette.
(u) Attached to Manistee.
(v) Part of Oceana and Ottawa.
(w) Attached to Ottawa.
(x) Attached to Mecosta.
(y) Attached to Alcona.
(z) Attached to Emmet.
(aa) Attached to Houghton.
(bb) Part of Iosco.
(cc) Attached to Kalkaska.
(ee) Part of Keweenaw.

## TABLE LXXXII.

*Showing number of Acres of Land, exclusive of cities, assessed in 1876, the average rate per acre at which the same was assessed, and the assessed value of Real Estate, exclusive of cities; also showing the population of 1874, the amount of Personal Property per capita, and the value of Personal Property as assessed in 1876.*

| COUNTIES. | Number of Acres of Land Assessed in 1876, except Cities. | Average Rate per Acre, except Cities. | Assessed Value of Real Estate, except Cities. | Population 1874. | Personal Property per Capita. | Assessed Value of Personal Property. |
|---|---|---|---|---|---|---|
| Alcona | 561,296.38 | $4 64 | $2,605,170 03 | 1,214 | $32 43 | $39,375 00 |
| Allegan | 514,524.00 | 14 14 | 7,277,238 00 | 32,381 | 39 61 | 1,282,564 00 |
| Alpena | 459,675.47 | 2 67 | 1,228,222 00 | 4,807 | 50 09 | 240,788 00 |
| Antrim | 244,665.73 | 3 02 | 739,675 91 | 3,240 | † ------ | 169,207 50 |
| Baraga | 333,707.44 | 1 94 | 646,431 00 | n ------ | † ------ | 29,035 00 |
| Barry | 344,675.97 | 10 63 | 3,666,686 00 | 22,051 | 27 55 | 607,584 00 |
| Bay | * 475,592.53 | 2 88 | 1,370,879 05 | 24,832 | 15 10 | 374,924 00 |
| Benzie | 177,144.72 | 2 99 | 527,998 00 | 2,663 | 19 09 | 50,825 00 |
| Berrien | 354,836.00 | 13 18 | 4,679,231 00 | 35,029 | 25 01 | 875,955 00 |
| Branch | 314,420.00 | 9 97 | 3,134,530 00 | 25,726 | 30 21 | 777,195 00 |
| Calhoun | 435,240.00 | 11 80 | 5,134,837 00 | 35,655 | 41 77 | 1,489,213 00 |
| Cass | 310,613.00 | 12 51 | 3,885,110 00 | 20,525 | 32 53 | 667,726 00 |
| Charlevoix | 170,003.34 | 2 30 | 391,436 00 | 2,360 | 19 83 | 46,803 00 |
| Cheboygan | 315,736.98 | 3 86 | 1,218,923 00 | 3,070 | 41 81 | 128,352 00 |
| Chippewa | 337,025.01 | 2 12 | 714,425 00 | 2,170 | 44 43 | 96,415 00 |
| Clare | 313,218.68 | 4 18 | 1,309,408 72 | 1,354 | 24 32 | 32,928 89 |
| Clinton | 362,730.21 | 10 40 | 3,770,989 00 | 23,661 | 26 77 | 633,400 00 |
| Crawford | cc ---------- | cc ----- | cc ---------- | cc ----- | ------ -- | cc ---------- |
| Delta | 380,796.38 | 2 31 | 879,654 39 | 4,741 | 23 35 | 110,683 00 |
| Eaton | 353,663.77 | 15 40 | 5,448,153 00 | 26,907 | 28 93 | 778,433 00 |
| Emmet | 95,506.86 | 3 55 | 338,573 07 | 1,272 | 25 63 | 32,599 50 |
| Genesee | 392,400.57 | 11 24 | 4,408,984 00 | 34,568 | 27 23 | 941,115 00 |
| Gladwin | 326,261.74 | 2 56 | 841,[illegible] 00 | 1 ------ | † ------ | 8,237 00 |
| Grand Traverse | 264,091.17 | 5 03 | 1,329,615 00 | 5,349 | 53 86 | 288,099 00 |
| Gratiot | 346,998.00 | 7 15 | 2,481,743 00 | 13,886 | 23 87 | 331,395 00 |
| Hillsdale | 375,851.00 | 13 71 | 5,153,682 00 | 31,566 | 35 56 | 1,122,340 00 |
| Houghton | 293,849.69 | 4 06 | 1,193,183 00 | 19,030 | † ------ | 199,145 00 |
| Huron | 460,664.00 | 2 83 | 1,302,739 00 | 11,964 | 22 23 | 265,931 00 |
| Ingham | 328,570.36 | 12 04 | 4,058,065 00 | 29,193 | 32 32 | 943,583 00 |
| Ionia | 358,756.00 | 9 08 | 3,258,907 00 | 28,376 | 21 45 | 608,750 00 |
| Iosco | 231,743.72 | 4 60 | 1,065,719 00 | 4,782 | † ------ | 78,593 00 |
| Isabella | 349,175.00 | 4 47 | 1,559,785 00 | 6,059 | 27 19 | 164,719 00 |
| Isle Royal (no report) | ---------- | -------- | ---------- | cc ---- | -------- | ---------- |
| Jackson | 433,055.00 | 14 40 | 6,233,985 00 | 37,988 | 34 85 | 1,323,780 00 |
| Kalamazoo | 350,605.00 | 21 14 | 7,412,390 00 | 32,284 | 41 08 | 1,326,155 00 |
| Kalkaska | 565,882.57 | 4 60 | 2,602,530 00 | 1,259 | 44 10 | 55,521 00 |
| Kent | 526,028.40 | 17 59 | 9,252,533 00 | 62,671 | 41 79 | 2,613,594 00 |
| Keweenaw | 191,547.58 | 4 26 | 819,717 77 | 5,415 | † ------ | 151,179 68 |
| Lake | 323,956.91 | 4 17 | 1,350,521 80 | 1,813 | 36 50 | 66,180 00 |
| Lapeer | 412,273.97 | 6 88 | 2,838,219 00 | 25,140 | 23 26 | 584,748 00 |
| Leelanaw | 157,484.77 | 3 10 | 488,291 00 | 5,031 | 25 24 | 126,963 00 |
| Lenawee | 465,499.00 | 17 51 | 8,153,105 00 | 46,084 | 41 69 | 1,921,017 00 |
| Livingston | 366,185.59 | 15 96 | 5,843,997 00 | 20,329 | 61 73 | 1,254,844 00 |
| Mackinac | 194,971.00 | 4 01 | 781,792 00 | 1,496 | 34 66 | 51,850 00 |
| Macomb | 299,008.00 | 17 53 | 5,242,985 00 | 28,305 | 39 47 | 1,117,180 00 |
| Manistee | 269,348.98 | 2 07 | 557,266 19 | 8,471 | 40 10 | 339,685 00 |
| Manitou | 34,466.25 | 2 23 | 76,813 50 | 657 | 40 62 | 26,687 50 |
| Marquette | 1,164,635.61 | 1 57 | 1,836,031 00 | 21,946 | 15 17 | 332,997 50 |
| Mason | 265,188.00 | 2 70 | 716,354 90 | 5,361 | 34 75 | 186,297 00 |
| Mecosta | 353,438.26 | 4 46 | 1,577,360 00 | 9,132 | 37 32 | 340,817 00 |
| Menominee | 625,120.03 | 1 96 | 1,225,269 08 | 3,490 | 39 56 | 138,050 75 |
| Midland | 315,626.00 | 2 52 | 796,752 00 | 5,306 | † ------ | 102,940 00 |
| Missaukee | 287,888.10 | 4 28 | 1,232,889 27 | 606 | 48 40 | 29,331 68 |
| Monroe | 347,447.81 | 9 66 | 3,355,780 00 | 30,111 | 23 50 | 707,460 00 |
| Montcalm | 431,933.00 | 7 74 | 3,344,598 00 | 20,815 | 27 62 | 562,331 00 |
| Montmorency | b ---------- | b ----- | b ---------- | b ------ | -------- | b ---------- |
| Muskegon | 283,283.88 | 5 05 | 1,430,976 00 | 19,375 | 39 87 | 772,399 00 |
| Newaygo | 517,779.00 | 4 26 | 2,210,233 00 | 8,758 | 23 39 | 204,829 00 |
| Oakland | 533,503.00 | 13 91 | 7,422,545 00 | 38,082 | 40 28 | 1,533,973 00 |
| Oceana | 324,033.00 | 4 71 | 1,526,414 00 | 8,360 | 18 40 | 153,787 00 |
| Ogemaw | 300,571.42 | 2 56 | 770,952 51 | bb ---- | † ------ | 18,010 00 |
| Ontonagon | 388,610.50 | 2 26 | 877,247 00 | 2,406 | 27 32 | 65,730 00 |
| Osceola | 340,965.76 | 4 82 | 1,641,358 00 | 6,216 | 32 68 | 203,128 00 |
| Oscoda | y ---------- | y ----- | y ---------- | y ------ | -------- | y ---------- |
| Otsego | 275,418.26 | 2 21 | 608,255 00 | l ------ | † ------ | 43,504 00 |
| Ottawa | 345,178.03 | 11 11 | 3,835,276 00 | 29,929 | 22 77 | 681,367 00 |
| Presque Isle | 222,076.56 | 4 07 | 904,620 56 | 1,615 | 13 24 | 21,378 00 |
| Roscommon | 273,730.59 | 2 76 | 755,539 00 | l ------ | † ------ | 26,720 00 |

TABLE LXXXII.—CONTINUED.

| COUNTIES. | Number of Acres of Land Assessed in 1876, except Cities. | Average Rate per Acre, except Cities. | Assessed Value of Real Estate, except Cities. | Population 1874. | Personal Property per Capita. | Assessed Value of Personal Property. |
|---|---|---|---|---|---|---|
| Saginaw | 504,679.91 | $6 20 | $3,130,967 00 | 48,409 | $20 77 | $1,005,483 60 |
| Sanilac | 550,587.00 | 4 88 | 2,686,992 00 | 16,292 | 25 94 | 422,694 60 |
| Schoolcraft | 636,174.42 | 1 25 | 795,499 10 | 1,290 | 28 80 | 37,150 00 |
| Shiawassee | 333,468.00 | 6 00 | 2,002,162 00 | 21,773 | 14 35 | 312,337 00 |
| St. Clair | 433,945.61 | 6 13 | 2,661,199 00 | 40,688 | 17 86 | 726,636 00 |
| St. Joseph | 317,267.00 | 21 10 | 6,694,830 00 | 25,906 | 62 06 | 1,607,606 00 |
| Tuscola | 494,580.00 | 3 80 | 1,877,580 00 | 16,998 | 16 66 | 283,210 00 |
| Van Buren | 388,663.76 | 17 51 | 6,806,675 00 | 29,156 | 78 47 | 2,287,783 00 |
| Washtenaw | 436,007.58 | 16 30 | 7,106,835 00 | 38,723 | 45 36 | 1,756,258 00 |
| Wayne | 368,398.00 | 15 32 | 5,643,202 00 | 144,903 | 186 47 | 27,019,805 00 |
| Wexford | 319,104.60 | 3 53 | 1,126,858 89 | 3,011 | 56 02 | 168,687 00 |
| Totals | 27,555,000.12 | $7 40 | $203,875,980 74 | 1,334,031 | $49 61 | $66,127,995 49 |

(b) Attached to Alpena.
(i) Attached to Antrim.
(l) Attached to Midland.
(n) Part of Houghton.
(y) Attached to Alcona.
(bb) Part of Iosco.
(cc) Attached to Kalkaska.
(ee) Part of Keweenaw.

† Could not be computed owing to change in territory between census of 1874 and assessment of 1876.

* Except also township of Bangor—acres not reported for that township.

## TABLE LXXXIII.

*Showing number of Acres of Land, exclusive of cities, assessed in 1881, the average rate per acre at which the same was assessed, and the assessed value of Real Estate, exclusive of cities; also showing the Population of 1880, the amount of Personal Property per capita, and the value of Personal Property as assessed in 1881.*

| COUNTIES. | Number of Acres of Land Assessed in 1881, except Cities. | Average Rate per acre, except Cities. | Assessed Value of Real Estate, except Cities. | Population, 1880. | Personal Property per Capita. | Assessed Value of Personal Property. |
|---|---|---|---|---|---|---|
| Alcona | 366,497.48 | $6 40 | $2,344,990 00 | 3,107 | $47 49 | $147,537 00 |
| Allegan | 516,120.00 | 15 75 | 8,129,523 00 | 37,806 | 40 28 | 1,522,802 00 |
| Alpena | 275,242.60 | 2 79 | 768,129 00 | 8,789 | 118 20 | 1,039,717 00 |
| Antrim | 280,656.98 | 6 20 | 1,739,472 75 | 5,237 | 78 94 | 413,339 26 |
| Baraga | 331,531.31 | 1 88 | 624,881 00 | 1,804 | 8 19 | 14,775 00 |
| Barry | 349,211.32 | 25 86 | 9,031,010 00 | 25,819 | 59 62 | 1,508,529 00 |
| Bay | 486,970.43 | 5 77 | 2,809,588 00 | 38,081 | 67 09 | 2,554,963 00 |
| Benzie | 180,329.45 | 5 43 | 989,481 00 | 3,433 | 62 95 | 216,105 00 |
| Berrien | 352,489 00 | 27 63 | 9,739,291 00 | 36,780 | 47 58 | 1,749,918 00 |
| Branch | 312,485.00 | 22 48 | 7,025,391 00 | 27,941 | 59 71 | 1,668,339 00 |
| Calhoun | 436,310.00 | 29 92 | 13,052,810 00 | 38,452 | 91 68 | 3,525,295 00 |
| Cass | 308,629.00 | 35 52 | 10,962,830 00 | 22,008 | 99 61 | 2,192,263 00 |
| Charlevoix | 222,581.00 | 6 13 | 1,365,047 00 | 5,114 | 52 06 | 266,224 00 |
| Cheboygan | 416,744.28 | 5 33 | 2,219,341 00 | 6,524 | 83 15 | 542,491 00 |
| Chippewa | 505,283.00 | 2 81 | 1,419,771 00 | 5,243 | 26 38 | 138,300 00 |
| Clare | 339,201.73 | 6 72 | 2,278,603 00 | 4,187 | 23 66 | 99,078 00 |
| Clinton | 361,235.53 | 39 51 | 14,274,095 00 | 27,534 | 85 61 | 2,357,198 00 |
| Crawford | 252,783.00 | 3 51 | 887,214 05 | 1,159 | 41 44 | 48,030 00 |
| Delta | No report | ---------- | ---------- | 6,812 | ---------- | ---------- |
| Eaton | 355,013.92 | 26 97 | 9,575,678 00 | 31,223 | 58 21 | 1,817,628 00 |
| Emmet | 191,714.00 | 3 75 | 718,442 00 | 6,640 | 16 18 | 107,451 00 |
| Genesee | 402,015.00 | 32 81 | 13,199,810 00 | 39,219 | 79 32 | 3,110,480 00 |
| Gladwin | 305,912.19 | 3 39 | 1,012,390 00 | 1,127 | 9 33 | 10,510 00 |
| Grand Traverse | 279,598.79 | 6 86 | 1,917,166 00 | 8,422 | 62 08 | 522,798 00 |
| Gratiot | 357,607.00 | 17 44 | 6,237,831 00 | 21,937 | 40 53 | 889,090 00 |
| Hillsdale | 375,911.00 | 36 73 | 13,807,390 00 | 32,726 | 85 31 | 2,793,919 00 |
| Houghton | 411,710.75 | 3 49 | 1,435,229 00 | 22,473 | 8 20 | 184,360 00 |
| Huron | 510,891.11 | 7 73 | 3,950,682 00 | 20,089 | 30 43 | 611,300 00 |
| Ingham | 342,613.57 | 27 65 | 9,474,568 00 | 33,677 | 76 95 | 2,591,280 00 |
| Ionia | 361,504.23 | 32 62 | 11,790,883 00 | 33,872 | 67 14 | 2,274,278 00 |
| Iosco | 245,870.47 | 4 15 | 1,021,116 59 | 6,873 | 11 88 | 81,675 00 |
| Isabella | 354,086.79 | 9 29 | 3,289,523 00 | 12,159 | 33 08 | 402,213 00 |
| Isle Royal | No report | ---------- | ---------- | 55 | ---------- | ---------- |
| Jackson | 431,641.60 | 13 56 | 5,851,621 00 | 42,031 | 28 57 | 1,200,938 00 |
| Kalamazoo | 349,793.00 | 49 97 | 15,730,640 00 | 34,342 | 93 32 | 3,170,390 00 |
| Kalkaska | 330,705.52 | 7 14 | 2,362,349 96 | 2,937 | 38 69 | 113,641 86 |
| Kent | 528,192.00 | 15 21 | 8,035,600 00 | 73,252 | 37 03 | 2,712,884 00 |
| Keweenaw | 203,570.23 | 2 29 | 466,354 13 | 4,270 | 35 81 | 152,909 00 |
| Lake | 344,249.03 | 5 08 | 1,749,595 00 | 3,233 | 53 03 | 171,447 00 |
| Lapeer | 412,392.00 | 22 09 | 9,108,910 00 | 30,138 | 70 51 | 2,125,134 00 |
| Leelanaw | 183,231.79 | 3 03 | 556,701 00 | 6,253 | 21 95 | 137,270 00 |
| Lenawee | 463,836.00 | 42 47 | 19,697,788 00 | 48,843 | 96 53 | 4,666,428 00 |
| Livingston | 362,262.00 | 28 63 | 10,372,174 00 | 22,251 | 89 13 | 1,983,243 00 |
| Mackinac | 293,151.33 | 4 37 | 1,280,202 46 | 2,902 | 42 64 | 123,753 25 |
| Macomb | 294,808.00 | 41 87 | 12,344,865 00 | 31,627 | 89 89 | 2,843,021 00 |
| Manistee | 312,024.07 | 2 15 | 671,909 00 | 12,533 | 37 25 | 466,833 00 |
| Manitou | No report | ---------- | ---------- | 1,334 | ---------- | ---------- |
| Marquette | 1,503,792.11 | 1 42 | 2,137,705 00 | 25,395 | 9 25 | 234,955 00 |
| Mason | 285,842.93 | 5 29 | 1,511,969 80 | 10,063 | 94 24 | 948,380 00 |
| Mecosta | 343,773.00 | 5 13 | 1,763,731 00 | 13,973 | 33 94 | 474,290 00 |
| Menominee | 722,624.44 | 2 02 | 1,464,631 12 | 11,988 | 24 46 | 293,231 13 |
| Midland | 322,206.92 | 5 93 | 1,913,747 00 | 6,894 | 28 93 | 199,474 00 |
| Missaukee | 326,999.86 | 4 33 | 1,418,722 44 | 1,553 | 64 93 | 100,836 00 |
| Monroe | 351,314.00 | 31 81 | 11,174,970 00 | 33,623 | 55 01 | 1,849,615 00 |
| Montcalm | 442,985.00 | 14 97 | 6,632,704 00 | 33,148 | 49 34 | 1,635,447 00 |
| Montmorency | 229,347.20 | 5 02 | 1,200,374 00 | 99 | ---------- | 10,873 00 |
| Muskegon | 279,236.29 | 5 62 | 1,568,612 00 | 26,586 | 36 85 | 979,777 00 |
| Newaygo | 527,704.00 | 4 13 | 2,181,791 00 | 14,688 | 22 21 | 326,293 00 |
| Oakland | 537,822.00 | 34 93 | 18,784,310 00 | 41,537 | 95 30 | 3,958,542 00 |
| Oceana | 333,316.29 | 4 61 | 1,536,926 00 | 11,699 | 17 05 | 199,467 00 |
| Ogemaw | 319,190.02 | 2 68 | 855,259 69 | 1,914 | 26 35 | 50,433 33 |
| Ontonagon | 739,809.29 | 1 85 | 1,370,117 00 | 2,565 | 17 49 | 44,855 00 |
| Osceola | 359,177.00 | 4 47 | 1,607,155 00 | 10,777 | 26 92 | 290,085 00 |
| Oscoda | 220,637.60 | 3 36 | 740,718 00 | 467 | 18 74 | 8,750 00 |
| Otsego | 302,486.00 | 3 25 | 981,796 00 | 1,974 | 61 17 | 120,753 00 |
| Ottawa | 338,376.99 | 12 81 | 4,336,039 00 | 33,125 | 42 26 | 1,400,019 00 |
| Presque Isle | 264,910.34 | 3 79 | 1,005,245 99 | 3,113 | 7 90 | 24,580 00 |
| Roscommon | 278,023.02 | 3 79 | 1,052,805 14 | 1,459 | 84 25 | 122,927 00 |

TABLE LXXXIII.—CONTINUED.

| COUNTIES. | Number of Acres of Land Assessed in 1881, except Cities. | Average Rate per acre, except Cities. | Assessed Value of Real Estate, except Cities. | Population, 1880. | Personal Property per Capita. | Assessed Value of Personal Property. |
|---|---|---|---|---|---|---|
| Saginaw | 507,549.02 | $10 41 | $17,703,731 00 | 59,095 | $54 33 | $3,210,370 00 |
| Sanilac | 595,742.61 | 5 76 | 3,430,247 00 | 26,341 | 17 81 | 469,026 00 |
| Schoolcraft | 725,125.41 | 3 14 | 2,279,623 41 | 1,575 | 127 88 | 201,411 00 |
| Shiawassee | 332,295.27 | 27 69 | 9,200,028 00 | 27,059 | 60 11 | 1,626,396 00 |
| St. Clair | 430,884.00 | 18 27 | 7,872,380 00 | 46,197 | 42 38 | 1,957,688 00 |
| St. Joseph | 312,365.00 | 42 04 | 13,130,290 00 | 26,626 | 107 58 | 2,864,373 00 |
| Tuscola | 501,006.00 | 13 43 | 6,728,021 00 | 25,739 | 38 25 | 984,626 00 |
| Van Buren | 384,684.21 | 27 28 | 10,493,753 00 | 30,807 | 71 53 | 2,203,683 00 |
| Washtenaw | 431,493.19 | 44 40 | 19,158,460 00 | 41,848 | 112 05 | 4,689,225 00 |
| Wayne | 368,415.00 | 51 46 | 18,958,569 00 | 166,426 | 147 78 | 24,593,996 00 |
| Wexford | 336,753.80 | 4 42 | 1,487,356 00 | 6,815 | 39 66 | 270,308 00 |
| Totals | 29,264,494.91 | ---------- | $431,002,680 53 | 1,636,335 | ---------- | $111,615,531 52 |

(ff) Includes Montmorency.

(gg) Included in Alpena.

# TABLE LXXXIV.

*Valuation of Real and Personal Property as assessed and as equalized by Boards of Supervisors in 1881.*

| COUNTIES. | Real Estate as Assessed. | Personal Property. | Total Assessed Valuation. | Amounts added or deducted by Boards of Supervisors. | Total Valuation as Equalized by Boards of Supervisors. | Real Estate as Equalized by Boards of Supervisors. | Personal Property. |
|---|---|---|---|---|---|---|---|
| Alcona | $2,344,990 00 | $147,537 00 | $2,492,527 00 | | $2,492,527 00 | $2,344,990 00 | $147,537 00 |
| Allegan | 8,129,528 00 | 1,522,802 00 | 9,652,330 00 | Ded. $348,830 00 | 9,303,500 00 | 7,780,698 00 | 1,522,802 00 |
| Alpena | 1,976,791 50 | 1,039,717 00 | 3,016,508 50 | Ded. 516,508 50 | 2,500,000 00 | 1,460,283 00 | 1,039,717 00 |
| Antrim | 1,739,472 75 | 413,399 36 | 2,152,872 11 | Add 84,810 14 | 2,237,682 25 | 1,824,282 89 | 413,399 36 |
| Baraga | 624,881 00 | 14,775 00 | 639,656 00 | | 639,656 00 | 624,881 00 | 14,775 00 |
| Barry | 9,822,930 00 | 1,509,529 00 | 11,332,459 00 | Ded. 27,168 00 | 11,305,291 60 | 9,795,762 00 | 1,509,529 06 |
| Bay | 10,346,218 00 | 2,554,965 00 | 12,901,183 00 | Ded. 1,901,183 00 | 11,000,000 00 | 8,445,035 00 | 2,554,965 00 |
| Benzie | 989,481 00 | 216,105 00 | 1,205,586 00 | Ded. 184,092 00 | 1,021,494 00 | 805,389 00 | 216,105 00 |
| Berrien | 11,168,516 00 | 1,749,918 00 | 12,918,434 00 | Add 123,503 00 | 13,041,937 00 | 11,292,019 00 | 1,749,918 00 |
| Branch | 8,593,566 00 | 1,668,399 00 | 10,261,965 00 | Ded. 106,965 00 | 10,155,000 00 | 8,486,601 00 | 1,668,399 00 |
| Calhoun | 16,002,480 00 | 3,525,285 00 | 19,527,765 00 | Add 976,388 25 | 20,504,153 25 | 16,978,868 25 | 3,525,285 00 |
| Cass | 11,475,340 00 | 2,192,262 00 | 13,667,602 00 | Add 612,398 00 | 14,280,000 00 | 12,087,738 00 | 2,192,262 00 |
| Charlevoix | 1,365,047 00 | 266,224 00 | 1,631,271 00 | Add 2,580 00 | 1,633,851 00 | 1,367,627 00 | 266,224 00 |
| Cheboygan | 2,219,341 00 | 542,491 00 | 2,761,832 00 | Ded. 60,832 00 | 2,701,000 00 | 2,158,509 00 | 542,491 00 |
| Chippewa | 1,419,771 00 | 138,300 00 | 1,558,071 00 | | 1,558,071 00 | 1,419,771 00 | 138,300 00 |
| Clare | 2,278,603 00 | 99,078 00 | 2,377,681 00 | Ded. 483,603 00 | 1,889,078 00 | 1,790,000 00 | 99,078 00 |
| Clinton | 14,274,095 00 | 2,357,198 00 | 16,631,293 00 | Ded. 1,332,793 00 | 15,298,500 00 | 12,941,302 00 | 2,357,198 00 |
| Crawford | 837,214 05 | 48,030 00 | 935,244 05 | Ded. 9,303 70 | 925,940 35 | 877,910 35 | 48,030 00 |
| Delta (No report). | | | | | | | |
| Eaton | 10,745,168 00 | 1,817,628 00 | 12,562,796 00 | Ded. 562,796 00 | 12,000,000 00 | 10,182,372 00 | 1,817,628 00 |
| Emmet | 718,442 00 | 107,451 00 | 825,893 00 | Add 10,500 00 | 836,393 00 | 728,942 00 | 107,451 00 |
| Genesee | 16,056,181 00 | 3,110,480 00 | 19,166,661 00 | Ded. 51,233 29 | 19,115,427 71 | 16,004,947 71 | 3,110,480 00 |
| Gladwin | 1,012,390 00 | 10,510 00 | 1,022,900 00 | Add 36,195 00 | 1,059,095 00 | 1,048,585 00 | 10,510 00 |
| G'd Traverse | 1,917,166 00 | 522,798 00 | 2,439,964 00 | Add 85,911 00 | 2,525,875 00 | 2,003,077 00 | 522,798 00 |
| Gratiot | 6,237,831 00 | 889,090 60 | 7,126,921 00 | Ded. 3,626,921 00 | 3,500,000 00 | 2,610,910 00 | 889,090 00 |
| Hillsdale | 15,118,700 00 | 2,793,919 00 | 17,912,619 00 | Add 100,615 00 | 18,013,234 00 | 15,219,315 00 | 2,793,919 00 |
| Houghton | 1,435,229 00 | 184,360 00 | 1,619,589 00 | | 1,619,589 00 | 1,435,229 00 | 184,360 00 |
| Huron | 3,950,682 00 | 611,300 00 | 4,561,982 00 | Add 100,000 00 | 4,661,982 00 | 4,050,682 00 | 611,300 00 |
| Ingham | 13,253,038 00 | 2,591,280 00 | 15,844,318 00 | Ded. 4,902,118 00 | 10,942,200 00 | 8,350,920 00 | 2,591,280 00 |
| Ionia | 13,206,013 00 | 2,274,278 00 | 15,480,291 00 | Ded. 549,540 00 | 14,930,751 00 | 12,656,473 00 | 2,274,278 00 |
| Iosco | 1,021,116 59 | 81,675 00 | 1,102,791 59 | Add 59,208 41 | 1,162,000 00 | 1,080,325 00 | 81,675 00 |
| Isabella | 3,289,523 00 | 402,213 00 | 3,691,736 00 | Ded. 591,736 00 | 3,100,000 00 | 2,697,787 00 | 402,213 00 |
| Isle Royal (No report). | | | | | | | |
| Jackson | 7,671,510 00 | 1,200,938 00 | 8,872,448 00 | Add 382,853 00 | 9,255,301 00 | 8,054,363 00 | 1,200,938 00 |
| Kalamazoo | 15,730,640 00 | 3,170,390 00 | 18,901,030 00 | Add 183,507 00 | 19,084,537 00 | 15,914,147 00 | 3,170,390 00 |
| Kalkaska | 2,362,349 96 | 113,641 66 | 2,475,991 62 | Add 4,315 38 | 2,480,307 00 | 2,366,665 34 | 113,641 66 |
| Kent | 15,303,368 00 | 2,712,884 00 | 18,016,252 00 | Ded. 3,042 00 | 18,013,210 00 | 15,300,326 00 | 2,712,884 00 |
| Keweenaw | 466,354 13 | 152,909 00 | 619,263 13 | Add 118,936 00 | 738,199 13 | 585,290 13 | 152,909 00 |
| Lake | 1,749,595 00 | 171,447 00 | 1,921,042 00 | Ded. 94,840 00 | 1,826,202 00 | 1,654,755 00 | 171,447 00 |
| Lapeer | 10,011,380 00 | 2,125,124 00 | 12,136,504 00 | Ded. 1,504 00 | 12,135,000 00 | 10,009,876 00 | 2,125,124 00 |
| Leelanaw | 556,701 00 | 137,270 00 | 693,971 00 | Add 80,063 00 | 774,034 00 | 636,764 00 | 137,270 00 |
| Lenawee | 22,170,841 00 | 4,666,428 00 | 26,837,269 00 | Add 208,695 00 | 27,045,964 00 | 22,379,536 00 | 4,666,428 00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Livingston | 10,372,174 00 | 1,983,243 00 | 12,355,417 00 | Ded. 3,017,007 00 | 9,338,410 00 | 7,355,167 00 | 1,983,243 00 |
| Mackinac | 1,290,202 46 | 123,753 25 | 1,403,955 71 | | 1,403,955 71 | 1,290,202 46 | 123,753 25 |
| Macomb | 13,167,665 00 | 2,843,021 00 | 16,010,686 00 | Ded. 10,686 00 | 16,000,000 00 | 13,156,979 00 | 2,843,021 00 |
| Manistee | 1,219,949 00 | 466,833 00 | 1,686,782 00 | Add 4,468 00 | 1,691,250 00 | 1,224,417 00 | 466,833 00 |
| Manitou (No report). | | | | | | | |
| Marquette | 2,886,525 00 | 234,955 00 | 3,121,480 00 | Ded. 216,540 00 | 2,904,940 00 | 2,669,985 00 | 234,955 00 |
| Mason | 2,216,864 80 | 948,380 00 | 3,165,244 80 | | 3,165,244 80 | 2,216,864 80 | 948,380 00 |
| Mecosta | 2,393,795 00 | 474,280 80 | 2,868,075 80 | Add 179,858 00 | 3,047,933 80 | 2,573,653 00 | 474,280 80 |
| Menominee | 1,464,631 12 | 293,231 13 | 1,757,862 25 | | 1,757,862 25 | 1,464,631 12 | 293,231 13 |
| Midland | 1,913,747 00 | 199,474 00 | 2,113,221 00 | Ded. 103,358 00 | 2,009,863 00 | 1,810,389 00 | 199,474 00 |
| Missaukee | 1,419,722 44 | 100,836 00 | 1,519,558 44 | Add 18,000 00 | 1,537,558 44 | 1,436,722 44 | 100,836 00 |
| Monroe | 13,103,375 00 | 1,849,615 00 | 14,952,990 00 | Add 260,286 50 | 15,213,276 50 | 13,363,661 50 | 1,849,615 00 |
| Montcalm | 7,730,724 00 | 1,635,447 00 | 9,366,171 00 | Ded. 876,171 00 | 8,490,000 00 | 6,854,553 00 | 1,635,447 00 |
| Montmorency | 1,200,374 00 | 10,873 00 | 1,211,247 00 | Ded. 8,374 00 | 1,202,873 00 | 1,192,000 00 | 10,873 00 |
| Muskegon | 2,606,782 00 | 979,777 00 | 3,586,559 00 | Ded. 266,456 75 | 3,320,102 25 | 2,340,325 25 | 979,777 00 |
| Newaygo | 2,181,791 00 | 326,292 00 | 2,508,083 00 | Ded. 361,791 00 | 2,146,292 00 | 1,820,000 00 | 326,292 00 |
| Oakland | 20,478,735 00 | 3,958,542 00 | 24,432,277 00 | Ded. 927,000 00 | 23,505,277 00 | 19,546,735 00 | 3,958,542 00 |
| Oceana | 1,536,926 00 | 199,467 00 | 1,736,393 00 | Add 39,200 00 | 1,775,593 00 | 1,576,126 00 | 199,467 00 |
| Ogemaw | 855,259 69 | 50,433 32 | 905,693 01 | Add 211,240 31 | 1,116,933 32 | 1,066,500 00 | 50,433 32 |
| Ontonagon | 1,370,117 00 | 44,855 00 | 1,414,972 00 | Ded. 393,414 00 | 1,021,558 00 | 976,703 00 | 44,855 00 |
| Osceola | 1,607,155 00 | 290,065 00 | 1,897,220 00 | Add 10,000 00 | 1,907,220 00 | 1,617,155 00 | 290,065 00 |
| Oscoda | 740,718 00 | 8,750 00 | 749,468 00 | | 749,468 00 | 740,718 00 | 8,750 00 |
| Otsego | 981,796 00 | 120,752 00 | 1,102,548 00 | Add 17,400 00 | 1,119,948 00 | 999,196 00 | 120,752 00 |
| Ottawa | 5,433,068 00 | 1,400,019 00 | 6,833,087 00 | Ded. 516,468 00 | 6,316,619 00 | 4,916,600 00 | 1,400,019 00 |
| Presque Isle | 1,005,245 99 | 24,580 00 | 1,029,825 99 | | 1,029,825 99 | 1,005,245 99 | 24,580 00 |
| Roscommon | 1,052,805 14 | 122,927 00 | 1,175,732 14 | Ded. 99,600 00 | 1,076,132 14 | 953,205 14 | 122,927 00 |
| Saginaw | 17,703,731 00 | 3,210,370 00 | 20,914,101 00 | Ded. 978,070 97 | 19,936,030 03 | 16,725,660 02 | 3,210,370 00 |
| Sanilac | 3,430,247 00 | 469,026 00 | 3,899,273 00 | Add 6,981 00 | 3,906,254 00 | 3,437,228 00 | 469,026 00 |
| Schoolcraft | 2,279,623 41 | 201,411 00 | 2,481,034 41 | Ded. 546,329 41 | 1,934,705 00 | 1,733,294 00 | 201,411 00 |
| Shiawassee | 10,310,648 00 | 1,626,396 00 | 11,937,044 00 | Ded. 927,044 00 | 11,010,000 00 | 9,383,604 00 | 1,626,396 00 |
| St. Clair | 11,695,675 00 | 1,957,688 00 | 13,653,363 00 | Ded. 2,512,285 00 | 11,141,078 00 | 9,183,390 00 | 1,957,688 00 |
| St. Joseph | 13,130,290 00 | 2,864,373 00 | 15,994,663 00 | Add 109,185 00 | 16,103,848 00 | 13,239,475 00 | 2,864,373 00 |
| Tuscola | 6,728,021 00 | 984,626 00 | 7,712,647 00 | Add 443,711 00 | 8,156,358 00 | 7,171,732 00 | 984,626 00 |
| Van Buren | 10,493,755 00 | 2,203,683 00 | 12,697,438 00 | Ded. 697,438 00 | 12,000,000 00 | 9,796,317 00 | 2,203,683 00 |
| Washtenaw | 24,335,440 00 | 4,689,225 00 | 29,024,665 00 | Add 975,335 00 | 30,000,000 00 | 25,310,775 00 | 4,689,225 00 |
| Wayne | 86,099,134 00 | 24,593,996 00 | 110,693,130 00 | Add 7,146,463 00 | 117,839,593 00 | 93,245,597 00 | 24,593,996 00 |
| Wexford | 1,665,556 00 | 270,308 00 | 1,935,864 00 | Ded. 112,962 50 | 1,822,901 50 | 1,552,593 50 | 270,308 00 |
| Totals | $557,728,752 03 | $111,615,531 52 | $669,344,283 55 | | $654,005,885 42 | $542,390,353 90 | $111,615,531 52 |

## TABLE LXXXV.

*Showing the Population for 1850, Aggregate of Real and Personal Estate as Equalized by the State Board of Equalization in 1851; the Aggregate of Real and Personal Estate as assessed in 1853, also as equalized by Boards of Supervisors and by the State Board of Equalization in 1853.*

| COUNTIES. | Population June 1, 1850. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1851. | Aggregate of Real and Personal Estate, as assessed in 1853. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1853. | Amount added or deducted by State Board. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1853. |
|---|---|---|---|---|---|---|
| Alcona | k | k | a | a | | a |
| Allegan | 5,127 | $488,677 99 | $1,541,737 43 | $1,541,737 43 | Ded. $200,000 00 | $1,341,737 43 |
| Alpena | k | k | a | a | | a |
| Antrim | k | k | c | c | | c |
| Baraga | n | n | n | n | | n |
| Barry | 5,072 | 409,769 00 | 1,210,484 55 | 1,224,587 95 | | 1,224,587 95 |
| Bay | d | d | d | d | | d |
| Benzie | e | e | e | e | | e |
| Berrien | 11,417 | 775,088 31 | 3,022,658 00 | 3,060,883 55 | | 3,060,883 55 |
| Branch | 12,472 | 837,289 15 | 3,138,308 00 | 2,874,354 00 | Add 863,954 00 | 3,738,308 00 |
| Calhoun | 19,169 | 1,637,347 00 | 3,742,270 00 | 3,646,946 00 | Add 1,783,758 00 | 5,430,704 00 |
| Cass | 10,906 | 841,411 00 | 2,710,660 00 | 2,700,660 00 | Add 244,278 00 | 2,944,938 00 |
| Charlevoix | k | k | z | z | | z |
| Cheboygan | k | k | k | k | | k |
| Chippewa | 898 | 105,291 00 | | | | 200,000 00 |
| Clare | d | d | d | d | | d |
| Clinton | 5,102 | 382,783 00 | 1,174,823 00 | 1,164,959 00 | | 1,164,959 00 |
| Crawford | k | k | a | a | | a |
| Delta | k | k | k | k | | k |
| Eaton | 7,058 | 519,614 52 | 1,692,927 00 | 1,732,854 00 | | 1,732,854 00 |
| Emmet | k | k | k | k | | k |
| Genesee | 12,031 | 735,209 28 | 2,960,924 54 | 2,548,036 54 | Add 566,319 46 | 3,114,356 00 |
| Gladwin | d | d | d | d | | d |
| Gr'd Traverse | k | | | | | |
| Gratiot | d | d | d | d | | d |
| Hillsdale | 16,159 | 998,240 00 | 4,169,523 76 | 4,167,225 76 | Ded. 157,702 76 | 4,009,523 00 |
| Houghton | | | | | | |
| Huron | m | m | m | m | | m |
| Ingham | 8,597 | 588,387 00 | 1,870,153 00 | 1,853,000 00 | | 1,853,000 00 |
| Ionia | 7,597 | 515,993 67 | 1,938,130 50 | 2,007,218 87 | | 2,007,218 87 |
| Iosco | k | k | d | d | | d |
| Isabella | d | d | d | d | | d |
| Isle Royal | n | n | n | n | | n |
| Jackson | 19,433 | 1,516,459 01 | 5,758,013 00 | 5,723,798 00 | | 5,723,798 00 |
| Kalamazoo | 13,179 | 1,093,192 45 | 4,787,874 00 | 4,810,655 00 | | 4,810,655 00 |
| Kalkaska | k | k | c | c | | c |
| Kent | 12,017 | 883,014 78 | 3,734,440 00 | 3,562,823 00 | | 3,562,823 00 |
| Keweenaw | n | n | n | n | | n |
| Lake | w | w | w | w | | w |
| Lapeer | 7,026 | 406,400 88 | 1,771,019 33 | 1,666,118 59 | | 1,666,118 59 |
| Leelanaw | k | k | c | c | | c |
| Lenawee | 26,330 | 2,358,059 82 | 9,590,431 00 | 9,609,813 00 | | 9,609,813 00 |
| Livingston | 13,475 | 807,687 20 | 2,738,576 86 | 3,273,626 97 | Ded. 200,000 00 | 3,073,626 97 |
| Mackinac | 3,597 | 127,709 70 | 169,902 25 | 169,902 25 | | 169,902 25 |
| Macomb | 15,532 | 896,246 00 | 4,366,399 00 | 4,510,399 00 | Ded. 500,000 00 | 4,010,399 00 |
| Manistee | w | q | c | c | | c |
| Manitou | k | k | k | k | | k |
| Marquette | aa | | | | | |
| Mason | w | q | q | q | | q |
| Mecosta | r | r | r | r | | r |
| Menominee | s | s | s | s | | s |
| Midland | d | d | d | d | | d |
| Missaukee | k | k | c | c | | c |
| Monroe | 14,695 | 960,344 22 | 3,843,595 00 | 3,811,875 00 | | 3,811,875 00 |
| Montcalm | 894 | 109,183 55 | 265,422 00 | 291,645 00 | | 291,645 00 |
| Montmorency | k | k | a | a | | a |
| Muskegon | v | v | v | v | | v |
| Newaygo | r | | 153,928 75 | 153,928 75 | | 153,928 75 |
| Oakland | 31,267 | 2,441,475 74 | 8,618,290 00 | 8,617,930 00 | | 8,617,930 00 |
| Oceana | w | w | w | w | | w |
| Ogemaw | k | k | a | a | | a |
| Ontonagon | aa | aa | aa | aa | | aa |
| Osceola | w | w | w | w | | w |

TABLE LXXXV.—CONTINUED.

| COUNTIES. | Population June 1, 1850. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1851. | Aggregate of Real and Personal Estate, as assessed in 1853. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1853. | Amount added or deducted by State Board. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1853. |
|---|---|---|---|---|---|---|
| Oscoda | k | k | a | a | | a |
| Otsego | k | k | a | a | | a |
| Ottawa | 5,567 | $481,847 23 | $1,239,114 25 | $1,322,479 70 | | $1,322,479 70 |
| Presque Isle | k | k | a | a | | a |
| Roscommon | k | k | a | a | | a |
| Saginaw | 2,609 | 357,973 01 | 1,327,393 49 | 1,336,002 22 | | 1,336,002 22 |
| Sanilac | 2,115 | 221,225 19 | 776,657 00 | 776,657 00 | | 776,657 00 |
| Schoolcraft | aa | t | t | t | | t |
| Shiawassee | 5,233 | 411,686 49 | 1,155,017 00 | 1,290,488 00 | | 1,290,488 00 |
| St. Clair | 10,411 | 977,261 25 | 3,325,076 02 | 3,052,532 39 | Add $856,511 61 | 3,909,044 00 |
| St. Joseph | 12,717 | 1,068,920 00 | 4,104,713 00 | 4,116,975 00 | | 4,116,975 00 |
| Tuscola | 291 | 115,249 58 | 281,122 43 | 278,157 93 | | 278,157 93 |
| Van Buren | 5,618 | 541,663 35 | 1,482,757 79 | 1,683,561 14 | | 1,683,561 14 |
| Washtenaw | 28,569 | 2,517,427 00 | 9,012,392 00 | 9,375,000 00 | | 9,375,000 00 |
| Wayne | 42,765 | 3,833,213 76 | 17,953,525 00 | 16,097,331 30 | Add 2,856,193 70 | 18,953,225 00 |
| Wexford | k | k | c | c | | c |
| Totals | | $30,976,270 08 | $115,647,758 95 | $114,049,162 34 | | $120,362,474 35 |

(a) Attached to Cheboygan.
(c) Attached to Grand Traverse.
(d) Attached to Saginaw.
(e) Part of Leelanaw.
(k) Attached to Mackinac.
(m) Attached to Sanilac.
(n) Part of Houghton.
(q) Attached to Oceana.
(r) Attached to Kent.
(s) Part of Delta.
(t) Attached to Marquette.
(v) Part of Oceana and Ottawa.
(w) Attached to Ottawa.
(z) Attached to Emmet.
(aa) Attached to Houghton.

## TABLE LXXXVI.

*Statement showing Population for 1854. Number of Acres of Land Assessed in 1856. Aggregate of Real and Personal Estate as Assessed in 1856. Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors for 1856, Amount added or deducted by State Board of Equalization, Aggregate of Real and Personal Estate as equalized by State Board of Equalization for 1856.*

| COUNTIES. | Population, 1854. | No. of Acres of Land assessed in 1856. | Aggregate of Real and Personal Estate, as assessed in 1856. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1856. |
|---|---|---|---|---|---|---|
| Alcona | a | a | a | a | | a |
| Allegan | 7,804 | 464,979.00 | $1,704,698 00 | $2,704,798 00 | Ded. $197,527 00 | $2,507,271 00 |
| Alpena | a | a | a | a | | a |
| Antrim | c | c | c | c | | c |
| Baraga | n | n | n | n | | n |
| Barry | 7,821 | 232,550.00 | 1,720,339 00 | 1,710,948 00 | Add 69,052 00 | 1,780,000 00 |
| Bay | d | d | d | d | | d |
| Benzie | e | e | e | e | | e |
| Berrien | 13,849 | 350,515 00 | 4,245,357 00 | 4,426,061 90 | Ded. 436,866 00 | 3,989,195 00 |
| Branch | 15,724 | 312,696 00 | 3,796,734 00 | 3,799,317 00 | Add 27,076 00 | 3,826,393 00 |
| Calhoun | 22,768 | 438,188.85 | 5,426,584 00 | 5,426,584 00 | Add 26,112 00 | 5,452,696 00 |
| Cass | 13,124 | 297,875.79 | 3,703,478 00 | 3,703,478 00 | Ded. 407,382 00 | 3,296,096 00 |
| Charlevoix | c | c | c | c | | c |
| Cheboygan | | 6,450.66 | 89,289 25 | 90,115 00 | Ded. 9,912 00 | 80,203 00 |
| Chippewa | 1,962 | | | | | 100,000 00 |
| Clare | d | d | d | d | | d |
| Clinton | 8,042 | 334,275.00 | 2,174,123 00 | 2,180,123 00 | Ded. 239,813 00 | 1,940,310 00 |
| Crawford | a | a | a | a | | a |
| Delta | k | k | k | k | | k |
| Eaton | 10,965 | 338,546,00 | 3,135,767 00 | 2,778,123 00 | Ded. 553,123 00 | 2,225,000 00 |
| Emmet | 4,971 | | | | | 50,000 00 |
| Genesee | 15,676 | 388,775.00 | 3,922,987 00 | 4,008,499 00 | Add 4,956 00 | 4,013,455 00 |
| Gladwin | d | l | l | l | | l |
| Gr'd Traverse | 911 | | | | | 100,000 00 |
| Gratiot | d | 224,929.00 | 585,847 00 | 474,191 00 | Ded. 118,191 00 | 356,000 00 |
| Hillsdale | 19,188 | 379,017.28 | 5,171,400 00 | 5,162,400 00 | Ded. 567,864 00 | 4,594,536 00 |
| Houghton | 4,323 | | | | | 300,000 00 |
| Huron | m | m | m | m | | m |
| Ingham | 11,222 | 333,374.05 | 2,894,810 55 | 2,925,811 55 | Ded. 611,811 55 | 2,314,000 00 |
| Ionia | 10,727 | 338,095.22 | 3,188,605 25 | 3,144,528 00 | Ded. 830,528 00 | 2,314,000 00 |
| Iosco | d | d | d | d | | d |
| Isabella | d | l | l | l | | l |
| Isle Royal | n | n | n | n | | n |
| Jackson | 21,855 | 435,677.00 | 6,526,113 00 | 6,199,925 00 | Ded. 681,591 00 | 5,517,334 00 |
| Kalamazoo | 16,893 | 346,246.00 | 5,781,582 00 | 5,619,229 00 | Ded. 618,115 00 | 5,001,114 00 |
| Kalkaska | c | c | c | c | | c |
| Kent | 17,869 | 566,136.24 | 6,503,338 18 | 6,557,737 50 | Ded. 721,351 50 | 5,836,386 00 |
| Keweenaw | n | n | n | n | | n |
| Lake | w | o | o | o | | o |
| Lapeer | 9,704 | 372,869.96 | 2,256,841 00 | 2,199,141 00 | Ded. 241,905 00 | 1,957,236 00 |
| Leelanaw | c | c | c | c | | c |
| Lenawee | 31,148 | | 10,674,746 00 | 10,536,619 00 | Ded. 1,159,028 00 | 9,377,591 00 |
| Livingston | 14,185 | 258,004.43 | 3,296,369 75 | 3,228,357 00 | Ded. 356,219 00 | 2,872,138 00 |
| Mackinac | 1,373 | 8,181.48 | 154,331 00 | 165,599 00 | Ded. 18,215 00 | 147,384 00 |
| Macomb | 18,114 | 289,270.00 | 5,296,466 00 | 5,296,466 00 | Ded. 582,511 00 | 4,713,955 00 |
| Manistee | c | 40,660.94 | | 221,531 44 | Ded. 24,368 44 | 197,163 00 |
| Manitou | 702 | | | | | 25,000 00 |
| Marquette | | | | | | 325,000 00 |
| Mason | q | | | | | 50,000 00 |
| Mecosta | r | r | r | r | | r |
| Menominee | s | s | s | s | | s |
| Midland | d | 201,103.79 | 560,600 66 | 569,514 80 | Ded. 62,646 80 | 506,868 00 |
| Missaukee | c | c | c | c | | c |
| Monroe | 18,122 | 330,728 00 | 4,236,159 00 | 4,199,570 00 | Ded. 461,952 00 | 3,737,618 00 |
| Montcalm | 2,060 | 219,889.00 | 893,580 00 | 893,581 00 | Ded. 96,293 00 | 796,288 00 |
| Montmorency | a | a | a | a | | a |
| Muskegon | v | v | v | v | | v |
| Newaygo | 970 | 201,000.00 | 702,286 00 | 647,225 00 | Ded. 71,194 00 | 576,031 00 |
| Oakland | 31,884 | 513,904.00 | 10,266,760 00 | 10,266,760 00 | Ded. 1,129,343 00 | 9,137,417 00 |
| Oceana | w | 54,428.84 | 209,292 62 | 232,994 62 | Ded. 25,628 62 | 207,366 00 |
| Ogemaw | a | a | a | a | | a |
| Ontonagon | 3,662 | 201,862.54 | | 511,169 88 | Add 22,830 12 | 534,000 00 |

TABLE LXXXVI—CONTINUED.

| COUNTIES. | Population, 1854. | No. of Acres of Land assessed in 1856. | Aggregate of Real and Personal Estate, as assessed in 1856. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1856. |
|---|---|---|---|---|---|---|
| Osceola | w | w | w | w | | w |
| Oscoda | a | a | a | a | | a |
| Otsego | a | a | a | a | | a |
| Ottawa | 9,233 | 398,344.46 | $2,363,729 21 | $2,433,437 15 | Ded. $263,228 15 | $2,170,209 00 |
| Presque Isle | a | a | a | a | | a |
| Roscommon | a | a | a | a | | a |
| Saginaw | 3,528 | 456,081.03 | 2,520,808 86 | 2,511,121 62 | Ded. 276,223 62 | 2,234,898 00 |
| Sanilac | 3,529 | 401,327.26 | 1,729,033 87 | 1,740,864 44 | Ded. 191,939 44 | 1,548,925 00 |
| Schoolcraft | t | t | t | t | | t |
| Shiawassee | 7,419 | 318,547.00 | 2,229,656 00 | 2,460,248 00 | Ded. 270,627 00 | 2,189,621 00 |
| St. Clair | 16,897 | 395,017.50 | 3,753,860 00 | 3,767,672 15 | Ded. 414,443 15 | 3,353,229 00 |
| St. Joseph | 15,087 | 311,292.44 | 5,273,170 00 | 5,412,958 00 | Ded. 962,958 00 | 4,450,000 00 |
| Tuscola | 1,504 | 279,163.34 | 927,026 79 | 922,094 45 | Ded. 101,430 45 | 820,664 00 |
| Van Buren | 8,000 | 389,406.58 | 2,402,243 75 | 2,395,925 94 | Ded. 263,551 94 | 2,132,374 00 |
| Washtenaw | 28,836 | 440,931.16 | 9,194,680 00 | 9,000,000 00 | Ded. 100,000 00 | 8,900,000 00 |
| Wayne | 65,778 | 382,762.00 | 20,236,936 00 | 19,148,481 00 | | 19,148,481 00 |
| Wexford | c | u | u | u | | u |
| Totals | | 12,167,812.84 | $149,749,623 41 | $149,638,200 44 | | $137,663,009 00 |

(a) Attached to Cheboygan.
(c) Attached to Grand Traverse.
(d) Attached to Saginaw.
(e) Part of Leelanaw.
(k) Attached to Mackinac.
(l) Attached to Midland.
(m) Attached to Sanilac.
(n) Part of Houghton.
(o) Attached to Mason.
(q) Attached to Oceana.
(r) Attached to Kent.
(s) Part of Delta.
(t) Attached to Marquette.
(u) Attached to Manistee.
(v) Part of Oceana and Ottawa.
(w) Attached to Ottawa.

## TABLE LXXXVII.

*Statement showing Population for 1860, Number of Acres of Land Assessed in 1861, Aggregate of Real and Personal Estate as assessed in 1861, Aggregate of Real and Personal Estate as equalized by Boards of Supervisors for 1861, Amount Added or Deducted by State Board of Equalization, Aggregate of Real and Personal Estate as equalized by State Board of Equalization for 1861.*

| COUNTIES. | Population, 1860. | No. of Acres of Land assessed in 1861. | Aggregate of Real and Personal Estate, as assessed in 1861. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1861. |
|---|---|---|---|---|---|---|
| Alcona | b | b | b | b | | b |
| Allegan | 16,091 | 493,761.00 | $3,061,876 00 | $2,998,876 00 | Ded. $18,551 00 | $2,980,325 00 |
| Alpena | 291 | 237,832.02 | 367,362 78 | 367,362 78 | | 367,362 78 |
| Antrim | c | c | c | c | | c |
| Baraga | n | n | n | n | | n |
| Barry | 14,041 | 347,747.00 | 1,757,797 00 | 1,743,642 00 | Add 397,078 00 | 2,140,720 00 |
| Bay | 3,169 | 142,078.00 | 697,425 00 | 635,309 00 | Add 40,553 00 | 675,862 00 |
| Benzie | e | e | e | e | | e |
| Berrien | 22,274 | 355,087 00 | 4,676,268 00 | 4,222,042 00 | Add 323,820 00 | 4,545,862 00 |
| Branch | 21,197 | 316,793.00 | 3,805,903 00 | 3,802,948 00 | Add 1,100,000 00 | 4,902,948 00 |
| Calhoun | 29,396 | 438,542.37 | 5,681,784 00 | 5,819,358 00 | Add 1,284,542 00 | 7,083,900 00 |
| Cass | 17,895 | 302,871.00 | 3,813,881 00 | 3,813,881 00 | Add 100,000 00 | 3,913,881 00 |
| Charlevoix | c | c | c | c | | c |
| Cheboygan | 599 | 22,170.00 | 83,086 20 | 77,225 20 | | 77,225 20 |
| Chippewa | 1,544 | 20,070.03 | 111,224 36 | 111,224 36 | Ded. 11,224 36 | 100,000 00 |
| Clare | f | f | f | f | | f |
| Clinton | 13,923 | 346,550.63 | 2,406,314 00 | 1,977,538 00 | Add 385,802 00 | 2,363,340 00 |
| Crawford | h | h | h | h | | h |
| Delta | 1,172 | | | | | 150,000 00 |
| Eaton | 16,574 | 350,679.00 | 3,201,910 00 | 3,046,828 00 | Ded. 253,513 00 | 2,793,315 00 |
| Emmet | 1,155 | 5,913 64 | 41,102 36 | 41,102 36 | | 41,102 36 |
| Genesee | 22,707 | 395,342.00 | 4,056,830 00 | 4,052,298 00 | Ded. 26,368 00 | 4,025,930 00 |
| Gladwin | l | l | l | l | | l |
| Gr'd Traverse | 1,467 | 164,661.00 | 521,298 00 | 498,459 00 | Add 50,000 00 | 548,459 00 |
| Gratiot | 4,227 | 274,602.00 | 787,372 00 | 595,711 00 | Add 12,150 00 | 607,861 00 |
| Hillsdale | 26,307 | 379,202.00 | 5,407,782 00 | 5,252,537 00 | Add. 993,714 00 | 6,246,251 00 |
| Houghton | 9,253 | 134,869.02 | 1,033,666 72 | 1,033,666 72 | Ded. 33,236 72 | 1,000,430 00 |
| Huron | 3,167 | 155,406.00 | 533,591 16 | 466,855 00 | Add 78,455 00 | 545,310 00 |
| Ingham | 17,456 | 333,497.00 | 2,910,247 00 | 2,748,990 00 | | 2,748,990 00 |
| Ionia | 16,665 | 343,828.50 | 3,376,465 25 | 3,356,875 25 | Ded. 316,356 25 | 3,040,519 00 |
| Iosco | 175 | 83,283.30 | 129,250 37 | 129,250 37 | | 129,250 37 |
| Isabella | 1,445 | 134,727.00 | 497,080 00 | 457,080 00 | Ded. 73,411 00 | 383,669 00 |
| Isle Royal | n | ee | ee | ee | | ee |
| Jackson | 26,664 | 432,158.00 | 6,476,813 00 | 5,034,559 00 | Add 2,018,121 00 | 7,052,680 00 |
| Kalamazoo | 24,663 | 346,255.00 | 4,646,911 00 | 4,689,662 00 | Add 1,100,000 00 | 5,789,662 00 |
| Kalkaska | c | c | c | c | | c |
| Kent | 30,743 | 516,425.00 | 6,357,454 00 | 6,431,679 00 | Add 1,764,609 00 | 8,196,288 00 |
| Keweenaw | n | 118,425.95½ | 771,032 02 | 771,032 02 | | 771,032 02 |
| Lake | o | o | o | o | | o |
| Lapeer | 14,875 | 392,626.80 | 2,286,622 00 | 2,137,307 00 | | 2,137,307 00 |
| Leelanaw | c | c | c | c | | c |
| Lenawee | 38,497 | 465,446.00 | 10,360,157 00 | 10,288,929 00 | Add 1,077,111 00 | 11,366,040 00 |
| Livingston | 16,629 | 365,472.92 | 3,156,530 00 | 3,155,430 00 | Ded. 155,230 00 | 3,000,200 00 |
| Mackinac | 1,939 | 30,975.77 | 147,785 00 | 147,785 00 | | 147,785 00 |
| Macomb | 23,112 | 295,845.00 | 4,899,459 00 | 4,899,959 00 | | 4,899,959 00 |
| Manistee | 874 | 99,043.35 | 338,662 62 | 335,662 62 | | 335,662 62 |
| Manitou | 1,043 | 9,386.00 | 62,177 00 | 62,177 00 | | 62,177 00 |
| Marquette | 2,899 | | | | | 1,000,000 00 |
| Mason | 831 | 83,261.76 | 212,897 40 | 178,133 82 | Add 75,737 18 | 253,871 00 |
| Mecosta | 1,017 | 235,876.28 | 342,410 15 | 342,410 15 | Add 130,089 85 | 472,500 00 |
| Menominee* | s | | | | | 154,000 00 |
| Midland | 783 | 280,090.14 | 583,520 76 | 572,385 96 | Add 11,134 04 | 583,520 00 |
| Missaukee | u | u | u | u | | u |
| Monroe | 21,648 | 333,904.00 | 4,071,835 00 | 4,061,383 00 | Add 200,000 00 | 4,261,383 00 |
| Montcalm | 3,984 | 315,742.38 | 1,037,162 00 | 1,037,107 00 | Ded. 100,000 00 | 937,107 00 |
| Montmorency | b | b | b | b | | b |
| Muskegon | 3,893 | 150,681.14 | 793,884 52 | 860,524 12 | | 860,524 12 |
| Newaygo | 2,766 | 250,316.26 | 703,911 00 | 675,412 00 | Add 100,000 00 | 775,412 00 |
| Oakland | 38,020 | 539,590.00 | 9,689,343 00 | 9,689,543 00 | Add 1,533,677 00 | 11,222,220 00 |
| Oceana | 1,802 | 166,278.10 | 427,054 59 | 424,943 95 | Ded. 62,943 95 | 362,000 00 |
| Ogemaw | l | h | h | h | | h |

* Formerly Bleeker.

TABLE LXXXVII—CONTINUED.

| COUNTIES. | Population. 1860. | No. of Acres of Land assessed in 1861. | Aggregate of Real and Personal Estate, as assessed in 1861. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1861. |
|---|---|---|---|---|---|---|
| Ontonagon | 4,575 | 193,009.50 | $1,132,329 00 | $1,132,329 00 | Ded. $479,007 00 | $653,322 00 |
| Osceola | x | x | x | x | | x |
| Oscoda | b | b | b | b | | b |
| Otsego | b | b | b | b | | b |
| Ottawa | 13,077 | 294,025.18 | 1,353,723 00 | 1,374,317 00 | Add 502,503 00 | 1,876,820 00 |
| Presque Isle | b | b | b | b | | b |
| Roscommon | l | l | l | l | | l |
| Saginaw | 12,758 | 420,679.00 | 2,480,487 60 | 2,250,424 63 | Add 243,235 37 | 2,493,660 00 |
| Sanilac | 7,623 | 403,292.90 | 1,520,274 14 | 1,513,158 34 | Ded. 21,350 34 | 1,491,808 00 |
| Schoolcraft | t | t | t | t | | t |
| Shiawassee | 12,888 | 341,427.02 | 2,672,644 00 | 2,468,282 00 | Add 100,000 00 | 2,568,282 00 |
| St. Clair | 26,814 | 424,325.00 | 3,607,428 00 | 3,575,391 00 | Add 421,449 00 | 3,996,840 00 |
| St. Joseph | 21,111 | 314,322.73 | 5,800,059 00 | 5,825,565 00 | | 5,825,565 00 |
| Tuscola | 4,835 | 341,245.49 | 1,118,891 69 | 930,709 42 | | 930,709 42 |
| Van Buren | 15,230 | 381,723.22 | 2 587,654 00 | 2,365,650 00 | Add 225,840 00 | 2,591,490 00 |
| Washtenaw | 35,757 | 429,832.00 | 9,258,558 00 | 8,900,000 00 | Add 1,260,430 00 | 10,160,430 00 |
| Wayne | 75,394 | 380,714.00 | 20,010,220 00 | 18,582,982 00 | Add 4,920,958 00 | 23,503,940 00 |
| Wexford | u | u | u | u | | u |
| Totals | | 15,162,710.40½ | $157,863,206 69 | $151,871,992 07 | | $172,055,808 89 |

(b) Attached to Alpena.
(c) Attached to Grand Traverse.
(e) Part of Leelanaw.
(f) Attached to Isabella.
(h) Attached to Iosco.
(l) Attached to Midland.
(n) Part of Houghton.
(o) Attached to Mason.
(s) Part of Delta.
(t) Attached to Marquette.
(u) Attached to Manistee.
(x) Attached to Mecosta.
(ee) Part of Keweenaw.

## TABLE LXXXVIII.

*Statement showing Population for 1864, Number of Acres of Land assessed in 1866, Aggregates of Real and Personal Estate as assessed in 1866, Aggregates of Real and Personal Estate as equalized by Boards of Supervisors for 1866, Amount added or deducted by State Board of Equalization, Aggregate of Real and Personal Estate as equalized by State Board of Equalization for 1866.*

| COUNTIES. | Population, 1864. | No. of Acres of Land assessed in 1866. | Aggregate of Real and Personal Estate, as assessed in 1866. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1866. |
|---|---|---|---|---|---|---|
| Alcona | b | b | b | b | | b |
| Allegan | 18,849 | 496,043.00 | $3,183,816 00 | $3,077,307 00 | Add $2,864,474 66 | $5,941,781 66 |
| Alpena | 963 | 349,255.26 | 1,299,284 36 | 1,299,284 36 | Add 448,563 96 | 1,747,848 32 |
| Antrim | 391 | 129,515.99 | 218,023 53 | 206,636 61 | Add 357,791 71 | 564,428 32 |
| Baraga | n | n | n | n | | n |
| Barry | 14,483 | 343,054.00 | 1,864,958 00 | 1,857,815 00 | Add 1,529,993 32 | 3,387,808 32 |
| Bay | 5,307 | 198,715.89 | 1,457,708 00 | 1,448,790 00 | Add 1,053,193 32 | 2,501,983 32 |
| Benzie | c | c | c | c | | c |
| Berrien | 25,720 | 349,426.46 | 4,620,040 00 | 5,257,735 00 | Add 2,843,726 66 | 8,101,461 66 |
| Branch | 22,458 | 311,867.00 | 4,055,296 00 | 4,038,260 00 | Add 2,961,713 32 | 6,999,973 32 |
| Calhoun | 30,488 | 440,770.00 | 6,167,774 00 | 6,167,774 00 | Add 6,190,894 32 | 12,358,668 32 |
| Cass | 17,776 | 309,850.00 | 4,003,755 00 | 3,988,000 00 | Add 3,091,051 66 | 7,079,051 66 |
| Charlevoix | c | c | c | c | | c |
| Cheboygan | 483 | 31,968.00 | 84,128 00 | 79,128 00 | Add 73,733 66 | 152,861 66 |
| Chippewa | 1,158 | 30,640.18 | 125,905 00 | 125,905 00 | Add 42,550 00 | 168,455 00 |
| Clare | f | f | f | f | | f |
| Clinton | 14,789 | 349,845.92 | 2,676,817 44 | 2,676,817 44 | Add 1,520,400 88 | 4,197,218 32 |
| Crawford | i | i | i | i | | i |
| Delta | 561 | | | | | 256,650 00 |
| Eaton | 16,497 | 358,608.00 | 3,164,512.00 | 3,092,860 00 | Add 1,375,000 00 | 4,467,860 00 |
| Emmet | 1,325 | 21,994.09 | 61,876 87 | 62,790 12 | Add 53,981 54 | 116,771 66 |
| Genesee | 22,043 | 392,991.00 | 4,387,699 00 | 4,464,737 00 | Add 3,281,541 32 | 7,746,278 32 |
| Gladwin | l | l | l | l | | l |
| Gr'd Traverse | 2,517 | 139,448.26 | 313,287 00 | 311,723 00 | Add 387,378 66 | 699,101 66 |
| Gratiot | 5,831 | 289,718.00 | 930,533 00 | 711,259 00 | Add 923,486 00 | 1,634,745 00 |
| Hillsdale | 27,324 | 377,222.23 | 6,013,013 00 | 5,791,041 00 | Add 3,212,845 66 | 9,003,886 66 |
| Houghton | 8,225 | 284,629.66 | 2,047,922 13 | 1,865,000 00 | Add 1,377,523 32 | 3,242,523 32 |
| Huron | 3,961 | 250,750.00 | 723,624 91 | 737,610 61 | Add 573,166 05 | 1,310,776 66 |
| Ingham | 17,123 | 340,468.00 | 3,147,872 00 | 2,863,000 00 | Add 1,606,960 00 | 4,469,960 00 |
| Ionia | 17,984 | 360,320.52 | 3,922,548 00 | 3,965,370 00 | Add 2,842,578 32 | 6,807,948 32 |
| Iosco | 395 | 257,387.88 | 633,273 81 | 633,273 81 | Add 510,849 51 | 1,144,123 32 |
| Isabella | 1,844 | 242,777.49 | 664,445 49 | 535,426 61 | Add 536,396 39 | 1,071,825 00 |
| Isle Royal | ee | ee | ee | ee | | ee |
| Jackson | 25,905 | 433,700.00 | 6,868,880 00 | 6,067,086 00 | Add 6,651,485 66 | 12,718,571 66 |
| Kalamazoo | 25,842 | 340,035.00 | 5,576,204 00 | 5,619,443 00 | Add 4,356,903 66 | 9,976,346 66 |
| Kalkaska | i | i | i | i | | i |
| Kent | 33,458 | 520,401.00 | 7,022,318 00 | 6,733,968 00 | Add 5,149,677 00 | 11,883,645 00 |
| Keweenaw | 5,180 | 248,629.38 | 1,703,846 20 | 1,409,700 20 | Add 1,102,473 12 | 2,512,173 32 |
| Lake | o | o | o | o | | o |
| Lapeer | 15,247 | 414,274.14 | 2,268,082 00 | 2,216,010 00 | Add 2,499,721 66 | 4,715,731 66 |
| Leelanaw | 2,389 | 60,193.91 | 227,554 00 | 231,564 00 | Add 99,047 66 | 330,611 66 |
| Lenawee | 40,202 | 468,382.00 | 10,724,100 00 | 10,286,178 00 | Add 7,273,065 32 | 17,559,243 32 |
| Livingston | 16,186 | 364,210.00 | 3,245,041 00 | 2,875,881 00 | Add 3,388,554 00 | 6,264,435 00 |
| Mackinac | 1,335 | 30,487.23 | 237,917 15 | 237,917 15 | Add 135,707 85 | 373,625 00 |
| Macomb | 22,404 | 295,580.00 | 5,193,249 00 | 5,273,249 00 | Add 3,336,934 32 | 8,610,183 32 |
| Manistee | 1,740 | 138,041.44 | 612,826 91 | 612,826 91 | Add 200,431 41 | 813,258 32 |
| Manitou | | 20,989.41 | 117,306 00 | 117,306 00 | Add 33,215 66 | 150,521 66 |
| Marquette | 3,849 | 280,569.48 | 1,139,989 00 | 1,128,794 00 | Add 1,118,611 00 | 2,247,405 00 |
| Mason | 844 | 101,664.95 | 239,188 42 | 238,889 00 | Add 247,086 00 | 485,975 00 |
| Mecosta | 1,583 | 276,464.87 | 769,954 10 | 775,040 50 | Add 438,434 50 | 1,213,475 00 |
| Menominee | 496 | 91,981.00 | 241,728 00 | 241,728 00 | Add 198,532 00 | 440,260 00 |
| Midland | 1,284 | 449,136.91 | 1,326,243 00 | 1,326,243 00 | Add 554,988 66 | 1,881,231 66 |
| Missaukee | u | u | u | u | | u |
| Monroe | 22,221 | 337,326.00 | 4,281,928 00 | 4,271,610 55 | Add 2,630,191 11 | 6,901,801 66 |
| Montcalm | 5,619 | 350,431.00 | 1,230,491 00 | 1,175,231 00 | Add 865,605 66 | 2,040,836 66 |
| Montmorency | b | b | b | b | | b |
| Muskegon | 5,810 | 190,715.09 | 1,634,747 72 | 1,623,689 39 | Add 1,019,417 27 | 2,643,106 66 |
| Newaygo | 3,481 | 273,218.59 | 949,174 00 | 918,265 18 | Add 632,176 48 | 1,580,441 66 |
| Oakland | 33,725 | 478,261.39 | 9,066,705 00 | 9,066,705 00 | Add 6,321,855 00 | 15,388,560 00 |
| Oceana | 2,379 | 200,600.65 | 575,690 69 | 610,861 13 | Add 353,478 87 | 964,340 00 |
| Ogemaw | h | h | h | h | | h |
| Ontonagon | 5,406 | 191,521.33 | 865,128 58 | 677,457 58 | Add 743,927 42 | 1,421,385 00 |

TABLE LXXXVIII—CONTINUED.

| COUNTIES. | Population, 1864. | No. of Acres of Land assessed in 1866. | Aggregate of Real and Personal Estate, as assessed in 1866. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1866. |
|---|---|---|---|---|---|---|
| Osceola | x | x | x | x | | x |
| Oscoda | b | b | b | b | | b |
| Otsego | l | l | l | l | | l |
| Ottawa | 15,156 | 314,984.00 | $1,870,761 00 | $1,832,122 00 | Add $1,671,071 32 | 3,503,193 32 |
| Presque Isle | b | b | b | b | | b |
| Roscommon | l | l | l | l | | l |
| Saginaw | 19,675 | 457,177.07 | 3,487,419 55 | 3,875,575 67 | Add 4,583,715 99 | 8,459,291 66 |
| Sanilac | 8,853 | 497,021.61 | 1,578,501 00 | 1,532,984 00 | Add 945,419 32 | 2,478,403 32 |
| Schoolcraft | t | t | t | t | | t |
| Shiawassee | 18,465 | 333,588.77 | 2,248,774 00 | 2,119,565 00 | Add 1,667,786 66 | 3,787,351 66 |
| St. Clair | 27,591 | 426,446.00 | 3,783,919 00 | 3,783,919 00 | Add 2,522,612 66 | 6,306,531 66 |
| St. Joseph | 21,796 | 303,531.00 | 6,395,603 00 | 6,343,536 00 | Add 2,886,205 66 | 9,229,741 66 |
| Tuscola | 6,983 | 333,572.00 | 1,406,023 00 | 1,433,593 00 | Add 988,860 32 | 2,432,453 32 |
| Van Buren | 17,820 | 330,828.00 | 3,415,697 00 | 3,025,000 00 | Add 1,901,238 32 | 4,926,238 32 |
| Washtenaw | 34,050 | 429,454 00 | 9,747,064 00 | 10,000,000 00 | Add 7,189,765 00 | 17,189,765 00 |
| Wayne | 83,326 | 371,027.36 | 23,245,285 00 | 23,239,561 00 | Add 18,132,157 32 | 41,371,718 32 |
| Wexford | u | u | u | u | | u |
| Totals | 803,745 | 17,111,710.91 | $179,065,450 86 | $176,209,042 82 | | $307,965,842 92 |

(b) Attached to Alpena.
(c) Attached to Grand Traverse.
(f) Attached to Isabella.
(h) Attached to Iosco.
(i) Attached to Antrim.
(l) Attached to Midland.
(n) Part of Houghton.
(o) Attached to Mason.
(t) Attached to Marquette.
(u) Attached to Manistee.
(x) Attached to Mecosta.
(ee) Part of Keweenaw.

## TABLE LXXXIX.

*Statement showing Population for 1870, Number of Acres of Land assessed in 1871, Aggregate of Real and Personal Estate as assessed in 1871, Aggregate of Real and Personal Estate as equalized by Boards of Supervisors for 1871, Amount added or deducted by State Board of Equalization, Aggregate of Real and Personal Estate as Equalized by State Board of Equalization for 1871.*

| COUNTIES. | No. of Towns and Wards. | Population, 1870. | No. of Acres of Land assessed in 1871. | Aggregate of Real and Personal Estate, as assessed in 1871. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1871. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'rd of Equalization for 1871. |
|---|---|---|---|---|---|---|---|
| Alcona | 4 | 766 | 443,798.37 | $1,240,235 15 | $1,240,235 15 | Add $839,764 85 | $2,100,000 00 |
| Allegan | 24 | 32,093 | 505,205.00 | 9,894,575 00 | 8,133,920 00 | Add 4,986,080 00 | 13,120,000 00 |
| Alpena | 3 | 2,756 | 304,879.51 | 1,484,160 70 | 1,384,160 70 | Ded. 474,160 70 | 910,000 00 |
| Antrim | 7 | 1,985 | 130,881.00 | 356,253 00 | 355,857 00 | Add 454,143 00 | 810,000 00 |
| Barry | 17 | 22,204 | 347,865.00 | 5,136,767 00 | 4,403,913 00 | Add 5,046,087 00 | 9,450,000 00 |
| Bay | 11 | 15,820 | 364,898.50 | 2,775,699 70 | 2,623,457 00 | Add 4,726,543 00 | 7,350,000 00 |
| Benzie | 10 | 2,184 | 129,064.00 | 449,214 00 | 481,052 00 | Ded. 41,052 00 | 440,000 00 |
| Berrien | 24 | 35,119 | 352,511.00 | 6,398,163 00 | 6,364,583 00 | Add 10,065,417 00 | 16,430,000 00 |
| Branch | 20 | 26,229 | 315,162.60 | 4,485,678 00 | 4,555,393 00 | Add 10,664,607 00 | 15,220,000 00 |
| Calhoun | 22 | 36,571 | 439,174.00 | 7,398,145 00 | 7,998,719 00 | Add 13,001,281 00 | 21,000,000 00 |
| Cass | 15 | 21,097 | 305,875.00 | 4,293,820 00 | 4,492,000 00 | Add 11,938,000 00 | 16,430,000 00 |
| Charlevoix | 6 | 1,724 | 28,367.47 | 107,426 41 | 106,824 00 | Add 53,176 00 | 160,000 00 |
| Cheboygan | 5 | 2,197 | 101,041.56 | 568,698 00 | 560,198 00 | Ded. 110,198 00 | 450,000 00 |
| Chippewa | 3 | 1,690 | 135,904.81 | 441,672 00 | 442,122 50 | Add 7,877 50 | 450,000 00 |
| Clare | 4 | 266 | 250,494.01 | 1,020,960 50 | 982,275 50 | Ded. 92,275 50 | 890,000 00 |
| Clinton | 16 | 22,852 | 358,081.00 | 3,796,253 00 | 4,327,418 00 | Add 5,122,582 00 | 9,450,000 00 |
| Crawford | ..... | l..... | cc..... | cc..... | cc..... | ..... | cc..... |
| Delta | 4 | 2,441 | 132,939.00 | 337,153 00 | 337,153 00 | Add 112,847 00 | 450,000 00 |
| Eaton | 17 | 25,164 | 358,926.00 | 5,229,407 00 | 5,531,598 93 | Add 5,698,401 07 | 11,230,000 00 |
| Emmet | 3 | 1,211 | 12,434.34 | 75,495 00 | 74,066 46 | Add 25,933 54 | 100,000 00 |
| Genesee | 22 | 33,965 | 400,642.03 | 6,160,948 00 | 6,122,976 00 | Add 11,727,024 00 | 17,850,000 00 |
| Gladwin | ..... | l..... | l..... | l..... | l..... | ..... | l..... |
| Gr'd Traverse | 9 | 4,443 | 146,844.00 | 920,216 00 | 919,766 00 | Add 440,234 00 | 1,360,000 00 |
| Gratiot | 16 | 11,809 | 345,902.00 | 2,749,140 00 | 2,065,749 00 | Add 554,251 00 | 2,620,000 00 |
| Hillsdale | 22 | 31,691 | 377,607.00 | 6,567,335 00 | 6,514,769 00 | Add 13,645,231 00 | 20,160,000 00 |
| Houghton | 11 | 13,881 | 303,422.47 | 1,338,293 97 | 1,338,293 97 | Add 761,706 03 | 2,100,000 00 |
| Huron | 22 | 9,049 | 369,521.00 | 1,254,771 00 | 1,276,987 00 | Add 2,053,013 00 | 3,330,000 00 |
| Ingham | 21 | 25,270 | 341,047.63 | 8,402,966 00 | 6,059,533 00 | Add 7,490,467 00 | 13,550,000 00 |
| Ionia | 16 | 27,676 | 359,153.00 | 4,144,237 00 | 4,205,831 00 | Add 9,964,169 00 | 14,170,000 00 |
| Iosco | 8 | 3,175 | 418,250.07 | 1,750,716 50 | 1,750,716 50 | Add 1,399,283 50 | 3,150,000 00 |
| Isabella | 12 | 4,113 | 224,797.00 | 1,305,154 00 | 1,309,496 00 | Add 180,504 00 | 1,490,000 00 |
| Jackson | 27 | 36,042 | 433,259.00 | 9,638,994 00 | 10,741,550 00 | Add 15,508,450 00 | 26,250,000 00 |
| Kalamazoo | 16 | 32,068 | 354,245.00 | 11,071,644 00 | 11,523,570 00 | Add 13,676,430 00 | 25,200,000 00 |
| Kalkaska | 3 | 424 | 137,422.43 | 182,254 00 | 182,254 00 | Add 127,746 00 | 310,000 00 |
| Kent | 32 | 50,410 | 525,541.00 | 10,169,203 00 | 9,505,187 00 | Add 21,494,813 00 | 31,000,000 00 |
| Keweenaw | 7 | 4,209 | 238,306.43 | 807,020 00 | 857,852 00 | Add 712,148 00 | 1,570,000 00 |
| Lake | 6 | 548 | 106,842.73 | 560,708 00 | 560,708 00 | Ded. 40,708 00 | 520,000 00 |
| Lapeer | 21 | 21,345 | 362,475.51 | 2,741,186 00 | 2,780,000 00 | Add 3,520,000 00 | 6,300,000 00 |
| Leelanaw | 8 | 4,577 | 109,993.46 | 492,541 07 | 487,581 07 | Add 32,418 93 | 520,000 00 |
| Lenawee | 26 | 45,503 | 467,462.00 | 11,196,462 00 | 11,093,596 00 | Add 15,156,404 00 | 26,250,000 00 |
| Livingston | 16 | 19,417 | 364,492.13 | 3,548,395 00 | 3,846,395 00 | Add 7,743,605 00 | 11,590,000 00 |
| Mackinac | 3 | 1,716 | 73,957 21 | 482,541 31 | 482,541 31 | Ded. 32,541 31 | 450,000 00 |
| Macomb | 14 | 28,050 | 297,341.00 | 6,032,737 00 | 6,077,737 00 | Add 10,822,263 00 | 16,900,000 00 |
| Manistee | 15 | 6,074 | 211,499.01 | 1,203,405 00 | 1,206,448 00 | Add 1,253,552 00 | 2,460,000 00 |
| Manitou | 3 | 891 | ..... | ..... | ..... | Add 100,000 00 | 100,000 00 |
| Marquette | 9 | 15,077 | 414,383.00 | 2,756,768 00 | 2,756,768 00 | Add 1,233,232 00 | 3,990,000 00 |
| Mason | 10 | 3,266 | 123,005.07 | 812,086 93 | 793,122 82 | Add 256,877 18 | 1,050,000 00 |
| Mecosta | 18 | 5,646 | 256,671.00 | 2,186,258 00 | 2,186,258 00 | Add 333,742 00 | 2,520,000 00 |
| Menominee | 2 | 1,894 | ..... | ..... | ..... | Add 1,570,000 00 | 1,570,000 00 |
| Midland | 9 | 3,383 | 688,624.00 | 2,431,168 00 | 2,382,174 00 | Add 767,826 00 | 3,150,000 00 |
| Missaukee | 5 | 130 | 134,826.80 | 497,169 43 | 497,169 43 | Ded. 47,169 43 | 450,000 00 |
| Monroe | 19 | 27,534 | 336,377.00 | 4,366,008 00 | 4,407,941 00 | Add 5,042,059 00 | 9,450,000 00 |
| Montcalm | 22 | 13,642 | 409,212.00 | 2,014,966 00 | 1,779,809 00 | Add 3,170,191 00 | 4,950,000 00 |
| Montmorency | ..... | b..... | b..... | b..... | b..... | ..... | b..... |
| Muskegon | 19 | 14,895 | 223,182.35 | 3,345,314 00 | 3,388,018 95 | Add 1,911,981 05 | 5,250,000 00 |
| Newaygo | 14 | 7,292 | 388,060.08 | 2,083,461 49 | 1,555,000 00 | Add 545,000 00 | 2,100,000 00 |
| Oakland | 29 | 40,906 | 531,341.00 | 9,659,855 00 | 9,730,855 00 | Add 16,519,145 00 | 26,250,000 00 |
| Oceana | 16 | 7,222 | 272,238.28 | 1,731,155 28 | 1,997,211 57 | Add 1,152,788 43 | 3,150,000 00 |
| Ogemaw | ..... | bb..... | bb..... | bb..... | bb..... | ..... | bb..... |
| Ontonagon | 5 | 2,846 | 244,959.60 | 710,299 00 | 500,268 00 | Add 809,732 00 | 1,310,000 00 |
| Osceola | 15 | 2,104 | 156,370.00 | 816,400 00 | 839,198 00 | Add 50,802 00 | 890,000 00 |

TABLE LXXXIX—CONTINUED.

| COUNTIES. | No. of Towns and Wards. | Population, 1870. | No. of Acres of Land assessed in 1871. | Aggregate of Real and Personal Estate, as assessed in 1871. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1871. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'rd of Equalization for 1871. |
|---|---|---|---|---|---|---|---|
| Oscoda | ..... | y ..... | y ..... | y ..... | y ..... | ..... | y ..... |
| Otsego | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Ottawa | 17 | 25,665 | 340,212.91 | $2,260,387 00 | $2,240,280 00 | Add $6,159,720 00 | $8,400,000 00 |
| Presque Isle | 2 | 355 | 88,387.38 | 345,771 24 | 238,943 45 | Add 211,056 55 | 450,000 00 |
| Roscommon | ..... | l ..... | l ..... | l ..... | l ..... | ..... | l ..... |
| Saginaw | 25 | 39,079 | 480,252.35 | 8,502,049 00 | 8,702,730 29 | Add 8,167,269 71 | 16,870,000 00 |
| Sanilac | 23 | 14,565 | 522,865.00 | 3,119,459 00 | 3,440,989 00 | Add 79,011 00 | 3,520,000 00 |
| Schoolcraft | 3 | t ..... | ..... | ..... | 577,845 00 | Ded. 57,845 00 | 520,000 00 |
| Shiawassee | 21 | 20,864 | 336,296.77 | 2,513,867 50 | 2,420,300 00 | Add 6,819,700 00 | 9,240,000 00 |
| St. Clair | 29 | 36,687 | 431,795.00 | 4,363,647 00 | 4,331,647 00 | Add 3,018,353 00 | 7,350,000 00 |
| St. Joseph | 16 | 26,274 | 312,045.00 | 12,924,365 00 | 12,753,118 00 | Add 11,546,882 00 | 24,300,000 00 |
| Tuscola | 24 | 13,721 | 450,746.00 | 1,821,155 00 | 1,864,437 00 | Add 2,175,563 00 | 4,040,000 00 |
| Van Buren | 18 | 28,735 | 382,521.00 | 7,170,713 00 | 4,554,000 00 | Add 6,996,000 00 | 11,550,000 00 |
| Washtenaw | 28 | 41,442 | 440,591.00 | 11,293,259 00 | 11,325,208 00 | Add 20,174,792 00 | 31,500,000 00 |
| Wayne | 31 | 119,054 | 368,008.00 | 24,662,718 00 | 23,493,101 00 | Add 66,506,899 00 | 90,000,000 00 |
| Wexford | 6 | 650 | 84,792.16 | 498,861 86 | 498,861 86 | Add 41,138 14 | 540,000 00 |
| Totals | 1,106 | 1,184,638 | 20,515,398.03 | $261,158,704 54 | $254,509,737 46 | ..... | $630,000,000 00 |

(b) Attached to Alpena.
(i) Attached to Antrim.
(l) Attached to Midland.
(t) Attached to Marquette.
(y) Attached to Alcona.
(bb) Part of Iosco.
(cc) Attached to Kalkaska.
(dd) Attached to Wexford.

## TABLE XC.

*Statement showing Population for 1874, Number of Acres of Land assessed in 1876, Aggregate of Real and Personal Estate as assessed in 1876, Aggregate of Real and Personal Estate as equalized by Boards of Supervisors for 1876, Amount added or deducted by State Board of Equalization, Aggregate of Real and Personal Estate as equalized by State Board of Equalization for 1876.*

| COUNTIES. | No. of Towns and Wards. | Population, 1874. | No. of Acres of Land assessed in 1876. | Aggregate of Real and Personal Estate, as assessed in 1876. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1876. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'rd of Equalization for 1876. |
|---|---|---|---|---|---|---|---|
| Alcona | 3 | 1,214 | 561,296.38 | $2,644,545 03 | $2,644,545 03 | Ded. $694,545 03 | $1,950,000 00 |
| Allegan | 24 | 32,381 | 514,524.00 | 8,559,802 00 | 7,193,421 00 | Add 5,806,579 00 | 13,000,000 00 |
| Alpena | 7 | 4,807 | 463,636.25 | 1,988,000 00 | 1,715,000 00 | Ded. 215,000 00 | 1,500,000 00 |
| Antrim | 13 | 3,240 | 244,665 73 | 908,883 41 | 910,684 41 | Ded. 10,684 41 | 900,000 00 |
| Baraga | 4 | n ..... | 333,707 44 | 675,466 00 | 675,466 00 | Add 124,534 00 | 800,000 00 |
| Barry | 20 | 22,051 | 347,681.97 | 4,630,823 00 | 4,690,388 00 | Add 5,309,612 00 | 10,000,000 00 |
| Bay | 25 | 24,832 | * 475,592.53 | 3,186,768 05 | 3,168,000 00 | Add 3,832,000 00 | 7,000,000 00 |
| Benzie | 11 | 2,663 | 177,144.72 | 578,823 00 | 578,823 00 | Ded. 28,823 00 | 550,000 00 |
| Berrien | 24 | 35,029 | 354,836.00 | 6,276,136 00 | 6,467,382 00 | Add 9,557,618 00 | 16,025,000 00 |
| Branch | 20 | 25,726 | 317,386.00 | 4,635,755 00 | 4,650,000 00 | Add 12,850,000 00 | 17,500,000 00 |
| Calhoun | 28 | 35,655 | 439,640 00 | 7,990,380 00 | 8,315,438 35 | Add 15,684,561 65 | 24,000,000 00 |
| Cass | 15 | 20,525 | 310,613.00 | 4,552,836 00 | 4,660,000 00 | Add 10,340,000 00 | 15,000,000 00 |
| Charlevoix | 8 | 2,360 | 170,004 33 | 438,239 00 | 438,239 00 | dd 11,761 00 | 450,000 00 |
| Cheboygan | 6 | 3,070 | 315,736 98 | 1,347,275 00 | 1,218,600 00 | Ded. 18,600 00 | 1,200,000 00 |
| Chippewa | 3 | 2,170 | 337,025 01 | 810,840 00 | 810,840 00 | Ded. 10,840 00 | 800,000 00 |
| Clare | 7 | 1,354 | 313,218 68 | 1,342,337 61 | 1,041,564 43 | Ded. 41,564 43 | 1,000,000 00 |
| Clinton | 16 | 23,661 | 362,730.21 | 4,404,389 00 | 4,727,000 00 | Add 4,773,000 00 | 9,500,000 00 |
| Crawford | ..... | cc ..... | cc ..... | cc ..... | cc ..... | ..... | cc ..... |
| Delta | 9 | 4,741 | 380,796.38 | 990,337 39 | 1,050,831 83 | Ded. 250,831 83 | 800,000 00 |
| Eaton | 20 | 26,907 | 355,863.77 | 6,640,076 00 | 7,016,481 00 | Add 4,133,519 00 | 11,150,000 00 |
| Emmet | 6 | 1,272 | 95,506 86 | 371,172 57 | 371,172 57 | Ded. 71,172 57 | 300,000 00 |
| Genesee | 22 | 34,568 | 395,616 57 | 6,355,549 00 | 6,382,436 00 | Add 10,467,564 00 | 16,850,000 00 |
| Gladwin | 3 | l ..... | 328,261 74 | 849,379 00 | 849,379 00 | Ded. 49,379 00 | 800,000 00 |
| Gr'd Traverse | 10 | 5,349 | 264,091.17 | 1,617,714 00 | 1,617,714 00 | Ded. 117,714 00 | 1,500,000 00 |
| Gratiot | 16 | 13,886 | 346,998 00 | 2,813,138 00 | 2,697,350 00 | Ded. 197,350 00 | 2,500,000 00 |
| Hillsdale | 22 | 31,566 | 375,851 00 | 6,849,062 00 | 6,397,578 00 | Add 13,627,422 00 | 20,025,000 00 |
| Houghton | 7 | 19,030 | 293,849.69 | 1,392,328 00 | 1,392,328 00 | Ded. 292,328 00 | 1,100,000 00 |
| Huron | 23 | 11,964 | 460,664 00 | 1,568,670 00 | 1,567,690 00 | Add 932,310 00 | 2,500,000 00 |
| Ingham | 24 | 29,193 | 333,959.39 | 6,747,143 00 | 5,000,000 00 | Add 8,000,000 00 | 13,000,000 00 |
| Ionia | 20 | 28,376 | 359,725 00 | 4,204,142 00 | 4,309,308 00 | Add 9,690,692 00 | 14,000,000 00 |
| Iosco | 8 | 4,782 | 231,743 72 | 1,144,312 00 | 984,000 00 | Add 16,000 00 | 1,000,000 00 |
| Isabella | 16 | 6,059 | 349,175.00 | 1,724,504 00 | 1,712,000 00 | Ded. 112,000 00 | 1,600,000 00 |
| Isle Royal (No | report) | ee ..... | ..... | ..... | ..... | Add 100,000 00 | 100,000 00 |
| Jackson | 27 | 37,988 | 433,055.00 | 9,460,490 00 | 11,361,890 00 | Add 14,888,110 00 | 26,250,000 00 |
| Kalamazoo | 16 | 32,284 | 350,605.00 | 8,738,545 00 | 8,104,260 00 | Add 14,895,740 00 | 23,000,000 00 |
| Kalkaska | 12 | 1,259 | 565,882 57 | 2,658,051 00 | 2,505,332 00 | Ded. 1,005,332 00 | 1,500,000 00 |
| Kent | 32 | 62,671 | 530,722 28 | 19,407,162 00 | 19,407,161 00 | Add 11,592,839 00 | 31,000,000 00 |
| Keweenaw | 7 | 5,415 | 191,547 58 | 967,897 45 | 1,151,179 68 | Ded. 351,179 68 | 800,000 00 |
| Lake | 12 | 1,813 | 323,956.91 | 1,416,701 80 | 1,416,701 80 | Ded. 416,701 80 | 1,000,000 00 |
| Lapeer | 22 | 25,140 | 412,273.97 | 3,699,457 00 | 3,343,000 00 | Add 2,907,000 00 | 6,250,000 00 |
| Leelanaw | 10 | 5,031 | 157,484 77 | 575,884 00 | 615,884 00 | Ded. 15,884 00 | 600,000 00 |
| Lenawee | 26 | 46,084 | 468,189 00 | 11,419,747 00 | 11,406,283 00 | Add 15,593,717 00 | 27,000,000 00 |
| Livingston | 16 | 20,329 | 366,185.59 | 7,098,841 00 | 8,420,841 00 | Add 5,579,159 00 | 14,000,000 00 |
| Mackinac | 3 | 1,496 | 194,971.00 | 833,642 00 | 833,642 00 | Ded. 33,642 00 | 800,000 00 |
| Macomb | 14 | 28,305 | 299,008.00 | 6,360,165 00 | 6,273,000 00 | Add 7,777,000 00 | 14,050,000 00 |
| Manistee | 14 | 8,471 | 269,348.00 | 1,458,492 19 | 1,458,392 19 | Add 541,607 81 | 2,000,000 00 |
| Maniton | 4 | 657 | 34,466 25 | 103,501 00 | 102,959 20 | Ded. 2,959 20 | 100,000 00 |
| Marquette | 20 | 21,946 | 1,164,635 61 | 3,061,123 50 | 3,067,175 00 | Add 932,825 00 | 4,000,000 00 |
| Mason | 16 | 5,361 | 265,188.00 | 1,181,608 90 | 1,180,358 90 | Add 819,641 10 | 2,000,000 00 |
| Mecosta | 19 | 9,132 | 353,438.26 | 2,629,187 00 | 2,510,483 00 | Ded. 10,483 00 | 2,500,000 00 |
| Menominee | 3 | 3,490 | 625,120.03 | 1,363,319 83 | 1,363,319 83 | Add 136,680 17 | 1,500,000 00 |
| Midland | 12 | 5,306 | 315,626.00 | 899,692 00 | 1,062,750 00 | Add 437,250 00 | 1,500,000 00 |
| Missaukee | 6 | 606 | 287,838.10 | 1,262,220 35 | 1,262,220 35 | Ded. 237,220 35 | 1,025,000 00 |
| Monroe | 19 | 30,111 | 347,447.81 | 4,819,235 00 | 4,869,893 00 | Add 4,630,107 00 | 9,500,000 00 |
| Montcalm | 23 | 20,815 | 434,493.00 | 4,294,979 00 | 4,572,454 00 | Ded. 72,454 00 | 4,500,000 00 |
| Montmorency | ..... | b ..... | b ..... | b ..... | b ..... | ..... | b ..... |
| Muskegon | 21 | 19,375 | 285,588.28 | 3,412,245 00 | 3,383,938 20 | Add 616,061 80 | 4,000,000 00 |
| Newaygo | 16 | 8,758 | 517,779.00 | 2,415,062 00 | 1,796,000 00 | Add 404,000 00 | 2,200,000 00 |
| Oakland | 29 | 38,082 | 536,514.00 | 9,635,773 00 | 9,655,773 00 | Add 16,594,227 00 | 26,250,000 00 |
| Oceana | 16 | 8,360 | 324,033.00 | 1,680,201 00 | 1,536,919 33 | Add 963,080 67 | 2,500,000 00 |

* Except Bangor; acres not reported for that township.

TABLE XC—CONTINUED.

| COUNTIES. | No. of Towns and Wards. | Population, 1874. | No. of Acres of Land assessed in 1876. | Aggregate of Real and Personal Estate, as assessed in 1876. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1876. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'rd of Equalization for 1876. |
|---|---|---|---|---|---|---|---|
| Ogemaw | 3 | bb | 300,571.42 | $788,962 51 | $788,010 00 | Add $11,990 00 | $800,000 00 |
| Ontonagon | 4 | 2,406 | 388,610.50 | 942,977 00 | 695,000 00 | Add 5,000 00 | 700,000 00 |
| Osceola | 15 | 6,216 | 340,965.76 | 1,845,486 00 | 2,048,614 00 | Ded. 48,614 00 | 2,000,000 00 |
| Oscoda | | y | y | y | y | | y |
| Otsego | 4 | | 275,418.26 | 651,759 00 | 651,759 00 | Ded. 1,759 00 | 650,000 00 |
| Ottawa | 20 | 29,929 | 348,647 73 | 5,308,328 00 | 6,558,687 00 | Add 941,313 00 | 7,500,000 00 |
| Presque Isle | 5 | 1,615 | 222,076 56 | 925,998 65 | 925,998 65 | Ded. 175,998 65 | 750,000 00 |
| Roscommon | 3 | l | 273,730 59 | 782,259 00 | 782,259 00 | Ded. 32,259 00 | 750,000 00 |
| Saginaw | 36 | 48,409 | 504,679 61 | 8,085,072 00 | 8,182,798 42 | Add 7,817,201 58 | 16,000,000 00 |
| Sanilac | 24 | 16,292 | 550,587.00 | 3,109,686 00 | 3,121,891 00 | Ded. 71,891 00 | 3,050,000 00 |
| Schoolcraft | 3 | 1,290 | 636,174.42 | 832,649 10 | 832,649 10 | Ded. 32,649 10 | 800,000 00 |
| Shiawassee | 23 | 21,773 | 337,888.00 | 2,632,764 00 | 4,199,500 00 | Add 5,050,500 00 | 9,250,000 00 |
| St. Clair | 31 | 40,688 | 434,953 61 | 4,601,025 00 | 4,679,481 00 | Add 3,570,519 00 | 8,250,000 00 |
| St. Joseph | 16 | 25,906 | 317,267 00 | 8,302,436 00 | 8,074,880 00 | Add 9,950,120 00 | 18,025,000 00 |
| Tuscola | 24 | 16,998 | 494,586.00 | 2,160,790 00 | 2,156,728 00 | Add 1,843,272 00 | 4,000,000 00 |
| Van Buren | 18 | 29,156 | 388,663 76 | 9,094,458 00 | 8,000,000 00 | Add 3,000,000 00 | 11,000,000 00 |
| Washtenaw | 30 | 38,723 | 436,007.58 | 10,827,545 00 | 9,000,000 00 | Add 21,000,000 00 | 30,000,000 00 |
| Wayne | 32 | 144,903 | 368,398.00 | 103,563,242 00 | 117,026,685 00 | Ded. 19,776,685 00 | 97,250,000 00 |
| Wexford | 15 | 3,011 | 319,104.60 | 1,295,545 89 | 1,236,692 43 | Ded. 236,692 43 | 1,000,000 00 |
| Totals | 1,161 | 1,334,031 | 27,605,262.96 | $374,841,031 23 | $386,877,102 70 | | $630,000,000 00 |

(b) Attached to Alpena.
(i) Attached to Antrim.
(l) Attached to Midland.
(n) Part of Houghton.
(y) Attached to Alcona.
(bb) Part of Iosco.
(cc) Attached to Kalkaska.
(ee) Part of Keweenaw.

## TABLE XCI.

*Statement showing Population for 1880, Number of Acres of Land assessed in 1881, Aggregate of Real and Personal Estate as assessed in 1881, Aggregate of Real and Personal Estate as equalized by Boards of Supervisors for 1881, Amount added or deducted by State Board of Equalization, Aggregate of Real and Personal Estate as equalized by State Board of Equalization for 1881.*

| COUNTIES. | Population, 1880. | No. of Acres of Land assessed in 1881. | Aggregate of Real and Personal Estate, as assessed in 1881. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1881. | Amount added or deducted by State Board of Equalization. | | Aggregate of Real and Personal Estate, as equalized by State Board of Equalization for 1881. |
|---|---|---|---|---|---|---|---|
| Alcona | 3,107 | 366,497.48 | $2,492,527 00 | $2,492,527 00 | Add | $7,473 00 | $2,500,000 00 |
| Allegan | 37,806 | 516,120 00 | 9,652,330 00 | 9,303,500 00 | Add | 4,196,500 00 | 13,500,000 00 |
| Alpena | ff 8,789 | 279,242.60 | 3,016,508 50 | 2,500,000 00 | Add | 600,000 00 | 3,100,000 00 |
| Antrim | 5,237 | 280,656.98 | 2,152,872 11 | 2,237,682 25 | Add | 262,317 75 | 2,500,000 00 |
| Baraga | 1,804 | 331,531.31 | 639,656 00 | 639,656 00 | Add | 660,344 00 | 1,300,000 00 |
| Barry | 25,319 | 352,302.32 | 11,332,459 00 | 11,305,291 00 | Add | 1,694,709 00 | 13,000,000 00 |
| Bay | 38,081 | 486,970.43 | 12,901,183 00 | 11,000,000 00 | Add | 7,000,000 00 | 18,000,000 00 |
| Benzie | 3,433 | 180,329.45 | 1,205,586 00 | 1,021,494 00 | Add | 478,506 00 | 1,500,000 00 |
| Berrien | 36,780 | 352,489 00 | 12,918,434 00 | 13,041,937 00 | Add | 1,958,063 00 | 15,000,000 00 |
| Branch | 27,941 | 315,483 00 | 10,261,965 00 | 10,155,000 00 | Add | 7,345,000 00 | 17,500,000 00 |
| Calhoun | 38,452 | 440,710.00 | 19,527,765 00 | 20,504,153 25 | Add | 3,995,846 75 | 24,500,000 00 |
| Cass | 22,008 | 310,549.00 | 13,667,602 00 | 14,280,500 00 | Add | 1,220,000 00 | 15,500,000 00 |
| Charlevoix | 5,114 | 222,581.00 | 1,631,271 00 | 1,633,851 00 | Add | 366,149 00 | 2,000,000 00 |
| Cheboygan | 6,524 | 416,744 28 | 2,761,832 00 | 2,701,000 00 | Add | 299,000 00 | 3,000,000 00 |
| Chippewa | 5,243 | 505,283.00 | 1,558,071 00 | 1,558,071 00 | Add | 441,929 00 | 2,000,000 00 |
| Clare | 4,187 | 339,201.73 | 2,377,681 00 | 2,889,078 00 | Add | 610,922 00 | 2,500,000 00 |
| Clinton | 27,534 | 361,235.53 | 16,631,293 00 | 15,298,500 00 | Add | 701,500 00 | 16,000,000 00 |
| Crawford | 1,159 | 252,783.00 | 935,244 05 | 925,940 35 | Add | 274,059 65 | 1,200,000 00 |
| Delta | 6,812 | No report. | ---------- | ---------- | Add | 2,500,000 00 | 2,500,000 00 |
| Eaton | 31,223 | 358,808.58 | 12,562,796 00 | 12,000,000 00 | Add | 4,000,000 00 | 16,000,000 00 |
| Emmet | 6,640 | 191,714.00 | 825,893 00 | 836,393 00 | Add | 1,163,607 00 | 2,000,000 00 |
| Genesee | 39,219 | 402,015.00 | 19,166,661 08 | 19,115,427 71 | Add | 1,884,572 29 | 21,000,000 00 |
| Gladwin | 1,127 | 305,912.19 | 1,022,900 00 | 1,059,095 00 | Add | 140,905 00 | 1,200,000 00 |
| G'd Traverse | 8,422 | 279,598.79 | 2,439,964 00 | 2,525,875 00 | Add | 474,125 00 | 3,000,000 00 |
| Gratiot | 21,937 | 357,607.00 | 7,126,921 00 | 3,500,000 00 | Add | 3,500,000 00 | 7,000,000 00 |
| Hillsdale | 32,726 | 375,911.00 | 17,912,619 00 | 18,013,234 00 | Add | 2,986,766 00 | 21,000,000 00 |
| Houghton | 22,473 | 411,710.75 | 1,619,589 00 | 1,619,589 00 | Add | 880,411 00 | 2,500,000 00 |
| Huron | 20,089 | 510,891.11 | 4,561,982 00 | 4,661,982 00 | Add | 338,018 00 | 5,000,000 00 |
| Ingham | 33,677 | 343,333.57 | 15,844,318 00 | 10,942,200 00 | Add | 5,057,800 00 | 16,000,000 00 |
| Ionia | 33,872 | 361,504.23 | 15,480,291 00 | 14,930,751 00 | Add | 1,069,249 00 | 16,000,000 00 |
| Iosco | 6,873 | 245,870.47 | 1,102,791 59 | 1,162,000 00 | Add | 838,000 00 | 2,000,000 00 |
| Isabella | 12,259 | 354,086.79 | 3,691,736 00 | 3,100,000 00 | Add | 900,000 00 | 4,000,000 00 |
| Isle Royal | 55 | No report. | ---------- | ---------- | Add | 100,000 00 | 100,000 00 |
| Jackson | 42,031 | 431,641.60 | 8,872,448 00 | 9,255,301 00 | Add | 17,744,699 00 | 27,000,000 00 |
| Kalamazoo | 34,342 | 349,793.00 | 18,901,030 00 | 19,084,537 00 | Add | 3,915,463 00 | 23,000,000 00 |
| Kalkaska | 2,937 | 330,705.52 | 2,475,991 62 | 2,480,307 00 | Add | 19,693 00 | 2,500,000 00 |
| Kent | 73,252 | 532,885.00 | 18,016,252 00 | 18,013,210 00 | Add | 14,986,790 00 | 33,000,000 00 |
| Keweenaw | 4,270 | 203,570.23 | 619,263 13 | 738,199 13 | Add | 61,800 87 | 800,000 00 |
| Lake | 3,233 | 344,249.03 | 1,921,042 00 | 1,826,202 00 | Add | 173,798 00 | 2,000,000 00 |
| Lapeer | 30,138 | 412,392.00 | 12,136,504 00 | 12,135,000 00 | Add | 865,000 00 | 13,000,000 00 |
| Leelanaw | 6,253 | 183,231.79 | 693,971 00 | 774,034 00 | Add | 225,966 00 | 1,000,000 00 |
| Lenawee | 48,343 | 463,836.00 | 26,837,269 00 | 27,045,964 00 | Add | 454,036 00 | 27,500,000 00 |
| Livingston | 22,251 | 362,262.00 | 12,355,417 00 | 9,338,410 00 | Add | 5,661,590 00 | 15,000,000 00 |
| Mackinac | 2,902 | 293,151.33 | 1,403,955 71 | 1,403,955 71 | Add | 1,096,044 29 | 2,500,000 00 |
| Macomb | 31,627 | 296,055.00 | 16,010,686 00 | 16,000,000 00 | Ded. | 1,000,000 00 | 15,000,000 00 |
| Manistee | 12,533 | 312,024.07 | 1,686,782 00 | 1,691,250 00 | Add | 1,808,750 00 | 3,500,000 00 |
| Manitou | 1,334 | No report. | ---------- | ---------- | Add | 250,000 00 | 250,000 00 |
| Marquette | 25,393 | 1,503,792.11 | 3,121,480 00 | 2,904,940 00 | Add | 2,095,060 00 | 5,000,000 00 |
| Mason | 10,063 | 285,842.93 | 3,165,244 80 | 3,165,244 80 | Ded. | 165,244 80 | 3,000,000 00 |
| Mecosta | 13,973 | 343,773.00 | 2,868,075 80 | 3,047,933 80 | Add | 452,066 20 | 3,500,000 00 |
| Menominee | 11,988 | 722,624.44 | 1,757,862 25 | 1,757,862 25 | Add | 742,137 75 | 2,500,000 00 |
| Midland | 6,894 | 322,206.92 | 2,113,221 00 | 2,009,863 00 | Add | 990,137 00 | 3,000,000 00 |
| Missaukee | 1,553 | 326,999.86 | 1,519,558 44 | 1,537,558 44 | Add | 262,441 56 | 1,800,000 00 |
| Monroe | 33,623 | 351,314 00 | 14,952,990 00 | 15,213,276 50 | Add | 786,723 50 | 16,000,000 00 |
| Montcalm | 33,148 | 446,517.00 | 9,366,171 00 | 8,490,000 00 | Add | 1,010,000 00 | 9,500,000 00 |
| Montmorency | gg | 239,347.20 | 1,211,247 00 | 1,202,873 00 | Add | 47,127 00 | 1,250,000 00 |
| Muskegon | 26,586 | 279,236.29 | 3,586,559 00 | 3,320,102 25 | Add | 3,179,897 75 | 6,500,000 00 |
| Newaygo | 14,688 | 527,704.00 | 2,508,083 00 | 2,146,292 00 | Add | 1,853,708 00 | 4,000,000 00 |
| Oakland | 41,537 | 540,520.00 | 24,432,277 00 | 23,505,277 00 | Add | 2,744,723 00 | 26,250,000 00 |
| Oceana | 11,699 | 333,316.29 | 1,736,393 00 | 1,775,593 00 | Add | 1,224,407 00 | 3,000,000 00 |
| Ogemaw | 1,914 | 319,190.02 | 905,693 01 | 1,116,933 32 | Add | 383,066 68 | 1,500,000 00 |
| Ontonagon | 2,565 | 739,809.29 | 1,414,972 00 | 1,021,558 00 | Add | 978,442 00 | 2,000,000 00 |

TABLE XCI—CONTINUED.

| COUNTIES. | Population, 1880. | No. of Acres of Land assessed in 1881. | Aggregate of Real and Personal Estate, as assessed in 1881. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1881. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State Board of Equalization for 1881. |
|---|---|---|---|---|---|---|
| Osceola | 10,777 | 359,177.00 | 1,897,220 00 | 1,907,220 00 | Add 592,780 00 | 2,500,000 00 |
| Oscoda | 467 | 220,637.60 | 749,468 00 | 749,468 00 | Add 250,532 00 | 1,000,000 00 |
| Otsego | 1,974 | 302,486.00 | 1,102,548 00 | 1,119,948 00 | Add 380,052 00 | 1,500,000 00 |
| Ottawa | 33,125 | 341,608.49 | 6,833,087 00 | 6,316,619 00 | Add 2,183,381 00 | 8,500,000 00 |
| Presque Isle | 3,113 | 264,910.34 | 1,029,825 99 | 1,029,825 99 | Add 220,174 01 | 1,250,000 00 |
| Roscommon | 1,459 | 278,023.62 | 1,175,732 14 | 1,076,132 14 | Add 423,867 86 | 1,500,000 00 |
| Saginaw | 59,095 | 507,549.02 | 20,914,101 00 | 19,936,030 03 | Add 5,063,969 97 | 25,000,000 00 |
| Sanilac | 26,341 | 595,742.61 | 3,899,273 00 | 3,906,254 00 | Add 1,093,746 00 | 5,000,000 00 |
| Schoolcraft | 1,575 | 725,125.41 | 2,481,034 41 | 1,934,705 00 | Add 565,295 00 | 2,500,000 00 |
| Shiawassee | 27,059 | 336,715.27 | 11,937,044 00 | 11,010,000 00 | Add 2,490,000 00 | 13,500,000 00 |
| St. Clair | 46,197 | 432,464.00 | 13,653,353 00 | 11,141,078 00 | Add 3,858,922 00 | 15,000,000 00 |
| St. Joseph | 26,626 | 312,365.00 | 15,994,663 00 | 16,103,848 00 | Add 1,896,152 00 | 18,000,000 00 |
| Tuscola | 25,739 | 501,006.00 | 7,712,647 00 | 8,156,358 00 | Add 843,642 00 | 9,000,000 00 |
| Van Buren | 30,807 | 384,684.21 | 12,697,438 00 | 12,000,000 00 | Add 2,000,000 00 | 14,000,000 00 |
| Washtenaw | 41,848 | 431,493.19 | 29,024,665 00 | 30,000,000 00 | ..... | 30,000,000 00 |
| Wayne | 166,426 | 368,415.00 | 110,693,130 00 | 117,839,593 00 | Add 12,160,407 00 | 130,000,000 00 |
| Wexford | 6,815 | 336,753.80 | 1,935,864 00 | 1,822,901 50 | Add 1,177,098 50 | 3,000,000 00 |
| Totals | 1,636,335 | 29,306,820.20 | $669,344,233 55 | $654,015,885 42 | ..... | $810,000,000 00 |

(ff) Includes Montmorency. (gg) Included in Alpena.

## TABLE LXXXVI.

*Statement showing Population for 1854. Number of Acres of Land Assessed in 1856. Aggregate of Real and Personal Estate as Assessed in 1856. Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors for 1856, Amount added or deducted by State Board of Equalization, Aggregate of Real and Personal Estate as equalized by State Board of Equalization for 1856.*

| COUNTIES. | Population, 1854. | No. of Acres of Land assessed in 1856. | Aggregate of Real and Personal Estate, as assessed in 1856. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1856. |
|---|---|---|---|---|---|---|
| Alcona | a | a | a | a | | a |
| Allegan | 7,804 | 464,979.00 | $1,704,698 00 | $2,704,798 00 | Ded. $197,527 00 | $2,507,271 00 |
| Alpena | a | a | a | a | | a |
| Antrim | c | c | c | c | | c |
| Baraga | n | n | n | n | | n |
| Barry | 7,821 | 232,550.00 | 1,720,339 00 | 1,710,948 00 | Add 69,052 00 | 1,780,000 00 |
| Bay | d | d | d | d | | d |
| Benzie | e | e | e | e | | e |
| Berrien | 13,849 | 350,515 00 | 4,245,357 00 | 4,426,061 90 | Ded. 426,866 00 | 3,999,195 00 |
| Branch | 15,724 | 312,696 00 | 3,796,734 00 | 3,799,317 00 | Add 27,076 00 | 3,826,393 00 |
| Calhoun | 22,768 | 438,188.85 | 5,426,584 00 | 5,426,584 00 | Add 26,112 00 | 5,452,696 00 |
| Cass | 13,124 | 297,878.79 | 3,703,478 00 | 3,703,478 00 | Ded. 407,882 00 | 3,295,595 00 |
| Charlevoix | c | c | c | c | | c |
| Cheboygan | | 6,450.66 | 89,289 25 | 90,115 00 | Ded. 9,912 00 | 80,203 00 |
| Chippewa | 1,962 | | | | | 100,000 00 |
| Clare | d | d | d | d | | d |
| Clinton | 8,042 | 334,275.00 | 2,174,123 00 | 2,180,123 00 | Ded. 239,813 00 | 1,940,310 00 |
| Crawford | a | a | a | a | | a |
| Delta | k | k | k | k | | k |
| Eaton | 10,965 | 338,546,00 | 3,135,767 00 | 2,778,123 00 | Ded. 553,123 00 | 2,225,000 00 |
| Emmet | 4,971 | | | | | 50,000 00 |
| Genesee | 15,676 | 388,775.00 | 3,922,987 00 | 4,008,499 00 | Add 4,956 00 | 4,013,455 00 |
| Gladwin | d | l | l | l | | l |
| Gr'd Traverse | 911 | | | | | 100,000 00 |
| Gratiot | d | 224,929.00 | 585,847 00 | 474,191 00 | Ded. 118,191 00 | 356,000 00 |
| Hillsdale | 19,188 | 379,017.28 | 5,171,400 00 | 5,162,400 00 | Ded. 567,864 00 | 4,594,536 00 |
| Houghton | 4,323 | | | | | 300,000 00 |
| Huron | m | m | m | m | | m |
| Ingham | 11,222 | 333,374.05 | 2,894,810 55 | 2,925,811 55 | Ded. 611,811 55 | 2,314,000 00 |
| Ionia | 10,727 | 338,095.22 | 3,188,605 25 | 3,144,528 00 | Ded. 830,528 00 | 2,314,000 00 |
| Iosco | d | d | d | d | | d |
| Isabella | d | l | l | l | | l |
| Isle Royal | n | n | n | n | | n |
| Jackson | 21,855 | 435,677.00 | 6,526,113 00 | 6,199,925 00 | Ded. 681,491 00 | 5,517,934 00 |
| Kalamazoo | 16,893 | 346,246.00 | 5,781,582 00 | 5,619,229 00 | Ded. 618,115 00 | 5,001,114 00 |
| Kalkaska | c | c | c | c | | c |
| Kent | 17,869 | 566,136.24 | 6,503,338 18 | 6,557,737 50 | Ded. 721,851 50 | 5,836,886 00 |
| Keweenaw | n | n | n | n | | n |
| Lake | w | o | o | o | | o |
| Lapeer | 9,704 | 372,869.96 | 2,256,841 00 | 2,129,141 00 | Ded. 241,905 00 | 1,887,236 00 |
| Leelanaw | c | c | c | c | | c |
| Lenawee | 31,148 | | 10,674,746 00 | 10,536,619 00 | Ded. 1,159,028 00 | 9,377,591 00 |
| Livingston | 14,185 | 258,004.43 | 3,296,369 75 | 3,238,357 00 | Ded. 356,219 00 | 2,882,138 00 |
| Mackinac | 1,373 | 3,181.48 | 154,331 00 | 165,599 00 | Ded. 18,215 00 | 147,384 00 |
| Macomb | 18,114 | 289,270.00 | 5,296,466 00 | 5,296,466 00 | Ded. 582,511 00 | 4,713,955 00 |
| Manistee | c | 40,660.94 | | 221,531 44 | Ded. 24,368 44 | 197,163 00 |
| Manitou | 702 | | | | | 25,000 00 |
| Marquette | | | | | | 323,000 00 |
| Mason | q | | | | | 50,000 00 |
| Mecosta | r | r | r | r | | r |
| Menominee | s | s | s | s | | s |
| Midland | d | 201,103.79 | 560,600 66 | 569,514 80 | Ded. 62,646 80 | 506,868 00 |
| Missaukee | c | c | c | c | | c |
| Monroe | 18,122 | 330,728 00 | 4,236,159 00 | 4,199,570 00 | Ded. 461,952 00 | 3,737,618 00 |
| Montcalm | 2,060 | 219,689.00 | 893,580 00 | 893,581 00 | Ded. 98,293 00 | 795,288 00 |
| Montmorency | a | a | a | a | | a |
| Muskegon | v | v | v | v | | v |
| Newaygo | 970 | 201,000.00 | 702,286 00 | 647,225 00 | Ded. 71,194 00 | 576,031 00 |
| Oakland | 31,884 | 513,904.00 | 10,266,760 00 | 10,266,760 00 | Ded. 1,129,343 00 | 9,137,417 00 |
| Oceana | w | 54,428.84 | 209,292 62 | 232,994 62 | Ded. 25,628 62 | 207,366 00 |
| Ogemaw | a | a | a | a | | a |
| Ontonagon | 3,662 | 201,862.54 | | 511,169 88 | Add 22,830 12 | 534,000 00 |

TABLE LXXXVI—CONTINUED.

| COUNTIES. | Population, 1854. | No. of Acres of Land assessed in 1856. | Aggregate of Real and Personal Estate, as assessed in 1856. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State B'd, 1856. |
|---|---|---|---|---|---|---|
| Osceola | w | w | w | w | | w |
| Oscoda | a | a | a | a | | a |
| Otsego | a | a | a | a | | a |
| Ottawa | 9,233 | 398,344.46 | $2,363,729 21 | $2,438,437 15 | Ded. $268,228 15 | $2,170,209 00 |
| Presque Isle | a | a | a | a | | a |
| Roscommon | a | a | a | a | | a |
| Saginaw | 3,528 | 456,081.03 | 2,520,803 86 | 2,511,121 62 | Ded. 276,223 62 | 2,234,898 00 |
| Sanilac | 3,529 | 401,327.26 | 1,729,033 87 | 1,740,864 44 | Ded. 191,939 44 | 1,548,925 00 |
| Schoolcraft | t | t | t | t | | t |
| Shiawassee | 7,419 | 318,547.00 | 2,229,656 00 | 2,460,248 00 | Ded. 270,627 00 | 2,189,621 00 |
| St. Clair | 16,897 | 395,017.50 | 3,753,860 00 | 3,767,672 15 | Ded. 414,443 15 | 3,353,229 00 |
| St. Joseph | 15,087 | 311,292.44 | 5,273,170 00 | 5,412,958 00 | Ded. 962,958 00 | 4,450,000 00 |
| Tuscola | 1,504 | 279,163.34 | 927,026 79 | 922,094 45 | Ded. 101,430 45 | 820,664 00 |
| Van Buren | 8,000 | 369,406.58 | 2,402,243 75 | 2,395,925 94 | Ded. 263,551 94 | 2,132,374 00 |
| Washtenaw | 23,836 | 440,931.16 | 9,194,580 00 | 9,000,000 00 | Ded. 100,000 00 | 8,900,000 00 |
| Wayne | 65,778 | 382,762.00 | 20,236,936 00 | 19,148,481 00 | | 19,148,481 00 |
| Wexford | c | u | u | u | | u |
| Totals | | 12,167,812.84 | $149,749,623 41 | $149,638,200 44 | | $137,663,009 00 |

(a) Attached to Cheboygan.
(c) Attached to Grand Traverse.
(d) Attached to Saginaw.
(e) Part of Leelanaw.
(k) Attached to Mackinac.
(l) Attached to Midland.
(m) Attached to Sanilac.
(n) Part of Houghton.
(o) Attached to Mason.
(q) Attached to Oceana.
(r) Attached to Kent.
(s) Part of Delta.
(t) Attached to Marquette.
(u) Attached to Manistee.
(v) Part of Oceana and Ottawa.
(w) Attached to Ottawa.

## TABLE XCI.

*Statement showing Population for 1880, Number of Acres of Land assessed in 1881, Aggregate of Real and Personal Estate as assessed in 1881, Aggregate of Real and Personal Estate as equalized by Boards of Supervisors for 1881, Amount added or deducted by State Board of Equalization, Aggregate of Real and Personal Estate as equalized by State Board of Equalization for 1881.*

| COUNTIES. | Population, 1880. | No. of Acres of Land assessed in 1881. | Aggregate of Real and Personal Estate, as assessed in 1881. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1881. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State Board of Equalization for 1881. |
|---|---|---|---|---|---|---|
| Alcona | 3,107 | 366,497.48 | $2,492,527 00 | $2,492,527 00 | Add $7,473 00 | $2,500,000 00 |
| Allegan | 37,806 | 516,120 00 | 9,652,330 00 | 9,303,500 00 | Add 4,196,500 00 | 13,500,000 00 |
| Alpena | ff 8,789 | 279,242.60 | 3,016,508 50 | 2,500,000 00 | Add 600,000 00 | 3,100,000 00 |
| Antrim | 5,237 | 230,656.98 | 2,152,872 11 | 2,237,682 25 | Add 262,317 75 | 2,500,000 00 |
| Baraga | 1,804 | 331,531.31 | 639,656 00 | 639,656 00 | Add 660,344 00 | 1,300,000 00 |
| Barry | 25,319 | 352,302.32 | 11,332,459 00 | 11,305,291 00 | Add 1,694,709 00 | 13,000,000 00 |
| Bay | 38,081 | 486,970.43 | 12,901,183 00 | 11,000,000 00 | Add 7,000,000 00 | 18,000,000 00 |
| Benzie | 3,433 | 180,329.45 | 1,205,586 00 | 1,021,494 00 | Add 478,506 00 | 1,500,000 00 |
| Berrien | 36,780 | 352,489.00 | 12,918,434 00 | 13,041,937 00 | Add 1,958,063 00 | 15,000,000 00 |
| Branch | 27,941 | 315,483.00 | 10,261,965 00 | 10,155,000 00 | Add 7,345,000 00 | 17,500,000 00 |
| Calhoun | 38,452 | 440,710.00 | 19,527,765 00 | 20,504,153 25 | Add 3,995,846 75 | 24,500,000 00 |
| Cass | 22,008 | 310,549.00 | 13,667,602 00 | 14,280,500 00 | Add 1,220,000 00 | 15,500,000 00 |
| Charlevoix | 5,114 | 222,581.00 | 1,631,271 00 | 1,633,851 00 | Add 366,149 00 | 2,000,000 00 |
| Cheboygan | 6,524 | 416,744 28 | 2,761,832 00 | 2,701,000 00 | Add 299,000 00 | 3,000,000 00 |
| Chippewa | 5,243 | 505,283.00 | 1,558,071 00 | 1,558,071 00 | Add 441,929 00 | 2,000,000 00 |
| Clare | 4,187 | 339,201.73 | 2,377,681 00 | 2,889,078 00 | Add 610,922 00 | 2,500,000 00 |
| Clinton | 27,534 | 361,225.53 | 16,631,293 00 | 15,298,500 00 | Add 701,500 00 | 16,000,000 00 |
| Crawford | 1,159 | 252,783.00 | 935,244 05 | 925,940 35 | Add 274,059 65 | 1,200,000 00 |
| Delta | 6,812 | No report. | ---------- | ---------- | Add 2,500,000 00 | 2,500,000 00 |
| Eaton | 31,223 | 358,308.58 | 12,562,796 00 | 12,000,000 00 | Add 4,000,000 00 | 16,000,000 00 |
| Emmet | 6,640 | 191,714.00 | 825,893 00 | 836,393 00 | Add 1,163,607 00 | 2,000,000 00 |
| Genesee | 39,219 | 402,015.00 | 19,166,661 09 | 19,115,427 71 | Add 1,884,572 29 | 21,000,000 00 |
| Gladwin | 1,127 | 305,912.19 | 1,022,900 00 | 1,059,095 00 | Add 140,905 00 | 1,200,000 00 |
| G'd Traverse | 8,422 | 279,598.79 | 2,439,964 00 | 2,525,875 00 | Add 474,125 00 | 3,000,000 00 |
| Gratiot | 21,937 | 357,607.00 | 7,126,921 00 | 3,500,000 00 | Add 3,500,000 00 | 7,000,000 00 |
| Hillsdale | 32,726 | 375,911.00 | 17,912,619 00 | 18,013,234 00 | Add 2,986,766 00 | 21,000,000 00 |
| Houghton | 22,473 | 411,710.75 | 1,619,589 00 | 1,619,589 00 | Add 880,411 00 | 2,500,000 00 |
| Huron | 20,089 | 510,891.11 | 4,561,982 00 | 4,661,982 00 | Add 338,018 00 | 5,000,000 00 |
| Ingham | 33,677 | 343,333.57 | 15,844,818 00 | 10,942,900 00 | Add 5,057,800 00 | 16,000,000 00 |
| Ionia | 33,872 | 361,504.23 | 15,480,291 00 | 14,930,751 00 | Add 1,069,249 00 | 16,000,000 00 |
| Iosco | 6,873 | 245,870.47 | 1,102,791 59 | 1,162,000 00 | Add 838,000 00 | 2,000,000 00 |
| Isabella | 12,259 | 354,086.79 | 3,691,736 00 | 3,100,000 00 | Add 900,000 00 | 4,000,000 00 |
| Isle Royal | 55 | No report. | ---------- | ---------- | Add 100,000 00 | 100,000 00 |
| Jackson | 42,031 | 431,641.60 | 8,872,448 00 | 9,255,301 00 | Add 17,744,699 00 | 27,000,000 00 |
| Kalamazoo | 34,342 | 349,793.00 | 18,901,030 00 | 19,084,537 00 | Add 3,915,463 00 | 23,000,000 00 |
| Kalkaska | 2,937 | 330,705.52 | 2,475,991 62 | 2,480,307 00 | Add 19,693 00 | 2,500,000 00 |
| Kent | 73,252 | 532,885.00 | 18,016,252 00 | 18,013,210 00 | Add 14,986,790 00 | 33,000,000 00 |
| Keweenaw | 4,270 | 203,570.23 | 619,263 13 | 738,199 13 | Add 61,800 87 | 800,000 00 |
| Lake | 3,233 | 344,249.03 | 1,921,042 00 | 1,826,202 00 | Add 173,798 00 | 2,000,000 00 |
| Lapeer | 30,138 | 412,392.00 | 12,136,504 00 | 12,135,000 00 | Add 865,000 00 | 13,000,000 00 |
| Leelanaw | 6,253 | 183,231.79 | 693,971 00 | 774,034 00 | Add 225,966 00 | 1,000,000 00 |
| Lenawee | 48,343 | 463,836.00 | 26,837,269 00 | 27,045,964 00 | Add 454,036 00 | 27,500,000 00 |
| Livingston | 22,251 | 362,262.00 | 12,355,417 00 | 9,338,410 00 | Add 5,661,590 00 | 15,000,000 00 |
| Mackinac | 2,902 | 293,151.33 | 1,403,955 71 | 1,403,955 71 | Add 1,096,044 29 | 2,500,000 00 |
| Macomb | 31,627 | 296,055.00 | 16,010,686 00 | 16,000,000 00 | Ded. 1,000,000 00 | 15,000,000 00 |
| Manistee | 12,533 | 312,024.07 | 1,686,782 00 | 1,691,250 00 | Add 1,808,750 00 | 3,500,000 00 |
| Manitou | 1,334 | No report. | ---------- | ---------- | Add 250,000 00 | 250,000 00 |
| Marquette | 25,393 | 1,503,792.11 | 3,121,480 00 | 2,904,940 00 | Add 2,095,060 00 | 5,000,000 00 |
| Mason | 10,063 | 235,842.93 | 3,165,244 80 | 3,165,244 80 | Ded. 165,244 80 | 3,000,000 00 |
| Mecosta | 13,973 | 343,773.00 | 2,868,075 80 | 3,047,933 80 | Add 452,066 20 | 3,500,000 00 |
| Menominee | 11,988 | 722,624.44 | 1,757,862 25 | 1,757,862 25 | Add 742,137 75 | 2,500,000 00 |
| Midland | 6,894 | 322,206.92 | 2,113,221 00 | 2,009,863 00 | Add 990,137 00 | 3,000,000 00 |
| Missaukee | 1,553 | 326,999.86 | 1,519,558 44 | 1,537,558 44 | Add 262,441 56 | 1,800,000 00 |
| Monroe | 33,623 | 351,314.00 | 14,952,990 00 | 15,213,276 50 | Add 786,723 50 | 16,000,000 00 |
| Montcalm | 33,148 | 446,517.00 | 9,366,171 00 | 8,490,000 00 | Add 1,010,000 00 | 9,500,000 00 |
| Montmorency | gg | 239,347.20 | 1,211,247 00 | 1,202,873 00 | Add 47,127 00 | 1,250,000 00 |
| Muskegon | 26,586 | 279,236.29 | 3,586,559 00 | 3,320,102 25 | Add 3,179,897 75 | 6,500,000 00 |
| Newaygo | 14,688 | 527,704.00 | 2,508,088 00 | 2,146,292 00 | Add 1,853,708 00 | 4,000,000 00 |
| Oakland | 41,537 | 540,520.00 | 24,432,277 00 | 23,505,277 00 | Add 2,744,723 00 | 26,250,000 00 |
| Oceana | 11,699 | 333,316.29 | 1,786,393 00 | 1,775,593 00 | Add 1,224,407 00 | 3,000,000 00 |
| Ogemaw | 1,914 | 319,190.02 | 905,693 01 | 1,116,933 32 | Add 383,066 68 | 1,500,000 00 |
| Ontonagon | 2,565 | 789,809.29 | 1,414,972 00 | 1,021,558 00 | Add 978,442 00 | 2,000,000 00 |

TABLE XCI—CONTINUED.

| COUNTIES. | Population, 1880. | No. of Acres of Land assessed in 1881. | Aggregate of Real and Personal Estate, as assessed in 1881. | Aggregate of Real and Personal Estate, as equalized by Boards of Supervisors, 1881. | Amount added or deducted by State Board of Equalization. | Aggregate of Real and Personal Estate, as equalized by State Board of Equalization for 1881. |
|---|---|---|---|---|---|---|
| Osceola | 10,777 | 359,177.00 | 1,897,220 00 | 1,907,220 00 | Add 592,780 00 | 2,500,000 00 |
| Oscoda | 467 | 220,637.60 | 749,468 00 | 749,468 00 | Add 250,532 00 | 1,000,000 00 |
| Otsego | 1,974 | 302,486.00 | 1,102,548 00 | 1,119,948 00 | Add 380,052 00 | 1,500,000 00 |
| Ottawa | 33,125 | 341,608.49 | 6,833,067 00 | 6,316,619 00 | Add 2,183,381 00 | 8,500,000 00 |
| Presque Isle | 3,113 | 264,910.34 | 1,029,825 99 | 1,029,825 99 | Add 220,174 01 | 1,250,000 00 |
| Roscommon | 1,459 | 278,023.62 | 1,175,732 14 | 1,076,132 14 | Add 423,867 86 | 1,500,000 00 |
| Saginaw | 59,095 | 507,549.02 | 20,914,101 00 | 19,936,030 03 | Add 5,063,969 97 | 25,000,000 00 |
| Sanilac | 26,341 | 595,742.61 | 3,899,275 00 | 3,906,254 00 | Add 1,093,746 00 | 5,000,000 00 |
| Schoolcraft | 1,575 | 725,125.41 | 2,481,034 41 | 1,934,705 00 | Add 565,295 00 | 2,500,000 00 |
| Shiawassee | 27,059 | 336,715.27 | 11,937,044 00 | 11,010,000 00 | Add 2,490,000 00 | 13,500,000 00 |
| St. Clair | 46,197 | 432,464.00 | 13,653,363 00 | 11,141,078 00 | Add 3,858,922 00 | 15,000,000 00 |
| St. Joseph | 26,626 | 312,365.00 | 15,994,663 00 | 16,103,848 00 | Add 1,896,152 00 | 18,000,000 00 |
| Tuscola | 25,739 | 501,006.00 | 7,712,647 00 | 8,156,358 00 | Add 843,642 00 | 9,000,000 00 |
| Van Buren | 30,807 | 334,684.21 | 12,697,438 00 | 12,000,000 00 | Add 2,000,000 00 | 14,000,000 00 |
| Washtenaw | 41,848 | 431,493.19 | 29,024,665 00 | 30,000,000 00 | ..... | 30,000,000 00 |
| Wayne | 166,426 | 368,415.00 | 110,693,130 00 | 117,839,593 00 | Add 12,160,407 00 | 130,000,000 00 |
| Wexford | 6,815 | 336,753.80 | 1,935,864 00 | 1,822,901 50 | Add 1,177,098 50 | 3,000,000 00 |
| Totals | 1,636,335 | 29,306,820.20 | $669,344,283 55 | $654,015,885 42 | ..... | $810,000,000 00 |

(ff) Includes Montmorency. (gg) Included in Alpena.

# REPORT

OF THE

# STATE INSPECTOR OF ILLUMINATING OILS,

OF THE

# STATE OF MICHIGAN,

FOR THE

YEAR ENDING DECEMBER 31, 1881.

BY AUTHORITY.

LANSING:
W. S. GEORGE & CO., STATE PRINTERS AND BINDERS.
1882.

# REPORT.

OFFICE OF STATE INSPECTOR OF ILLUMINATING OILS,
*Gilead, Mich., Jan. 20, 1882.*

*To the Honorable* DAVID H. JEROME,

*Governor of the State of Michigan, and to the State Board of Health:*

GENTLEMEN,—In compliance with the provisions of section 3, session laws of 1879, I very respectfully submit my report of the inspection of illuminating oils for the year ending December 31, 1881.

At the date of my report in January, 1881, the State was divided into twenty districts with one deputy inspector for each district.

I found it necessary to divide one district, and this was done on the 2d day of April, and J. M. Ramsdell of Manistee appointed deputy inspector for the new district.

I now have twenty-one deputy inspectors. For the convenience of dealers and deputies, the list with territory assigned to each is again made a part of this report.

FIRST DISTRICT.

F. W. Averill, Detroit—Wayne county and eastern part of Oakland county,

SECOND DISTRICT.

James Cook, Adrian—Lenawee and Monroe counties.

THIRD DISTRICT.

C. H. Macumber, Coldwater—Branch county, Hillsdale (with the exception of Litchfield), and all of the towns in St. Joseph county on the main line of Lake Shore & Michigan Southern Railroad, and Constantine on Grand Rapids Division.

FOURTH DISTRICT.

J. T. Cobb, Schoolcraft—Kalamazoo county, Three Rivers, Mendon, and Centerville in St. Joseph county, Plainwell and Otsego in Allegan county, Paw Paw, Decatur, and Lawton in Van Buren county.

FIFTH DISTRICT.

Thomas Mars, Berrien Center—Berrien and Cass counties, and Van Buren county with the exception of Paw Paw, Decatur and Lawton.

SIXTH DISTRICT.

W. T. Adams, Grand Rapids—Kent and Newaygo counties.

SEVENTH DISTRICT.

H. J. W. Campman, Grand Haven—Ottawa and Muskegon counties, and Allegan county except Plainwell and Otsego.

EIGHTH DISTRICT.

Philo. T. Bates, Ionia—Ionia, Clinton, and Montcalm counties.

NINTH DISTRICT.

Isaac Bull, Albion—Calhoun, Barry, Eaton, and Ingham counties and Litchfield in Hillsdale county.

TENTH DISTRICT.

Albert Stiles, Jackson—Jackson and Washtenaw counties.

ELEVENTH DISTRICT.

J. L. Willett, Flint—Genesee, Shiawassee, Lapeer, and Livingston counties, and western part of Oakland county.

TWELFTH DISTRICT.

John Weller, East Saginaw—Saginaw, Bay, Gratiot, Midland and Tuscola counties.

THIRTEENTH DISTRICT.

Chester Gaylord, Port Huron—St. Clair, Macomb, Sanilac, and Huron counties.

FOURTEENTH DISTRICT.

Fred. S. Goodrich, Alpena—Alpena, Alcona, Iosco, and Presque Isle counties.

FIFTEENTH DISTRICT.

A. Mathews, Marquette—Marquette, Menominee, and Schoolcraft counties.

SIXTEENTH DISTRICT.

James Ross, Hancock—Houghton, Ontonagon, and Keweenaw counties.

SEVENTEENTH DISTRICT.

I. H. McCollum, Ludington—Mason, Lake, Oceana, and Osceola counties.

EIGHTEENTH DISTRICT.

J. M. Ramsdell, Manistee—Manistee county.

NINETEENTH DISTRICT.

C. H. Spalding, Sault Ste. Marie—Chippewa county.

TWENTIETH DISTRICT.

F. E. Hamel, Cheboygan—Cheboygan, Emmet, Presque Isle, and Mackinaw counties.

TWENTY-FIRST DISTRICT.

John Pulcipher, Acme—Grand Traverse, Antrim, Benzie, Charlevoix, Leelanaw, and Wexford counties.

The only changes made during the past year in deputy inspectors are as fol lows:

In the second district A. W. Smith resigned on the 1st day of May and James Cook was appointed on May 2d to succeed him.

In the seventh district S. C. Glover resigned on the 31st day of December, and H. J. W. Campman was appointed in his place.

Albert Stiles was appointed on the 1st day of July to succeed Charles Wolcott in the tenth district.

In April C. R. Lackey, deputy in the twenty-first district, died, and John Pulcipher was appointed to the vacancy.

All of these deputies are legal inspectors at any place in the State; but with a view of securing economy, efficiency, and harmony in the service, the State has been divided into inspection districts. Each one is held responsible for a faithful execution of the law in his district, and he is not expected to go outside of it unless so directed by the State inspector.

The quantity of oil sold in Detroit has been so great that it has been found necessary to employ an assistant for the deputy at that point a part of the time. This accounts for the large expense account of Deputy Inspector Averill.

The following table contains a list of the deputy inspectors with postoffice address, amount of inspection fees collected, and salary and expenses paid to each.

| NAMES OF DEPUTIES. | Postoffice Address. | Bbls. Approved. | Bbls. Rejected. | Bbls. Inspected. | Gallons Approved. | Gallons Rejected. | Gallons Inspected. | Fees Collected. | Salary Paid. | Expenses Paid. | Total Paid. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| F. M. Averill | Detroit | 30,899 | 145 | 31,044 | 1,566,891 | 7,332 | 1,574,223 | $6,614 14 | $1,172 40 | $203 75 | $1,376 15 |
| A. W. Smith *a* | Adrian | 1,139 | 1 | 1,140 | 58,587 | 49 | 58,636 | 293 18 | 221 90 | 48 80 | 270 70 |
| James Cook *b* | Adrian | 3,127 | ..... | 3,127 | 162,413 | ..... | 162,413 | 642 39 | 483 84 | 109 95 | 593 79 |
| C. H. Macumber | Coldwater | 3,299 | ..... | 3,299 | 169,717 | ..... | 169,717 | 691 72 | 641 31 | 81 10 | 722 41 |
| J. T. Cobb | Schoolcraft | 5,592 | 2 | 5,594 | 294,095 | 100 | 294,195 | 1,166 71 | 766 10 | 46 40 | 812 50 |
| Thomas Mars | Berrien Center | 1,206 | 1 | 1,207 | 60,835 | 50 | 60,885 | 221 17 | 349 99 | 61 96 | 411 95 |
| Wm. T. Adams | Grand Rapids | 20,520 | 25 | 20,545 | 1,040,553 | 1,261 | 1,041,814 | 4,402 88 | 1,178 05 | 20 10 | 1,198 15 |
| S. C. Glover | Grand Haven | 3,124 | ..... | 3,124 | 156,446 | ..... | 156,446 | 654 36 | 642 05 | 91 25 | 733 30 |
| Philo T. Bates | Ionia | 5,229 | 59 | 5,388 | 269,307 | 3,022 | 272,329 | 1,143 31 | 755 10 | 73 75 | 828 85 |
| Isaac Bull | Albion | 3,867 | 9 | 3,876 | 195,494 | 450 | 195,944 | 868 58 | 670 57 | 159 96 | 830 53 |
| C. Woolcott | Jackson | 8,463 | ..... | 8,463 | 416,741 | ..... | 416,741 | 2,083 70 | 573 40 | 16 90 | 590 30 |
| Albert Stiles *c* | Jackson | 9,843 | ..... | 9,843 | 484,188 | ..... | 484,188 | 1,810 84 | 580 30 | 28 45 | 608 75 |
| J. L. Willett | Flint | 5,159 | ..... | 5,159 | 251,848 | ..... | 251,848 | 1,098 45 | 749 84 | 96 75 | 846 59 |
| John Weller | East Saginaw | 12,403 | 5 | 12,408 | 622,470 | 250 | 622,720 | 2,642 19 | 1,062 50 | 81 60 | 1,144 10 |
| C. Gaylord | Port Huron | 4,961 | ..... | 4,961 | 253,986 | ..... | 253,986 | 1,053 03 | 743 25 | 76 30 | 819 55 |
| F. S. Goodrich | Alpena | 1,375 | ..... | 1,375 | 68,667 | ..... | 68,667 | 289 10 | 368 42 | 29 50 | 397 92 |
| A. Mathews | Marquette | 5,213 | 16 | 5,229 | 263,354 | 800 | 264,154 | 1,078 96 | 747 79 | 140 00 | 887 79 |
| James Ross | Hancock | 2,961 | 10 | 2,971 | 148,144 | 500 | 148,644 | 605 79 | 438 88 | 85 90 | 524 78 |
| I. H. McCullum | Ludington | 1,269 | ..... | 1,269 | 64,721 | ..... | 64,721 | 255 68 | 399 36 | 58 65 | 458 01 |
| C. H. Spaulding | Sault Ste. Marie | 560 | ..... | 560 | 28,000 | ..... | 28,000 | 110 30 | 290 42 | ..... | 290 42 |
| F. E. Hamel | Cheboygan | 1,046 | ..... | 1,046 | 54,423 | ..... | 54,423 | 236 59 | 351 58 | 77 80 | 429 38 |
| C. N. Luchy *d* | Acme | 20 | ..... | 20 | 514 | ..... | 514 | 5 07 | 17 50 | ..... | 17 50 |
| John Pulcipher *e* | Acme | 946 | 16 | 962 | 48,884 | 819 | 49,703 | 178 77 | 297 22 | 63 80 | 361 02 |
| J. M. Ramsdell *f* | Manistee | 526 | 49 | 575 | 25,100 | 2,514 | 27,614 | 114 84 | 303 35 | ..... | 303 35 |
| Totals | ..... | 132,847 | 338 | 133,185 | 6,705,378 | 17,147 | 6,722,525 | $28,261 75 | $13,805 12 | $1,652 67 | $15,457 79 |

*a* Resigned May 2, 1881.
*b* Appointed May 2.
*c* Appointed July 1.
*d* Died April.
*e* Appointed May.
*f* Appointed March.

| | | |
|---|---|---|
| Office expenses: | | |
| Salary | $1,500 00 | |
| Traveling expenses | 194 87 | |
| Postage | 33 68 | |
| Stationery and deputies' blanks | 32 00 | |
| Total expenses of State Inspector's office | 1,760 55 | |
| Deputies' salaries and expenses | 15,457 79 | |
| Paid State Treasurer in July | 12,420 31 | |
| Amount on hand January 14, 1882 | 5,386 17 | |
| | | $35,024 82 |
| Amount on hand January 17, 1881 | 6,763 07 | |
| Fees collected in 1881 | 28,261 75 | |
| | | $35,024 82 |

The amendments made to the inspection law by Act No. 49, session laws of 1881, took effect on the 11th day of September. This act changed the fee from one-half cent per gallon to sixteen cents for each barrel, cask, or package. This change reduced the fee a little more than nine cents for each barrel.

| | | |
|---|---|---|
| The total number of barrels inspected from January 1 to September 10 was | 76,003 | |
| Gallons | 3,822,526 | |
| Fees collected | | $19,112 63 |
| Barrels inspected from September 11 to December 31 | 57,182 | |
| Gallons | 2,899,999 | |
| Fees collected | | $9,149 12 |
| At one-half cent per gallon the fees would have amounted to | | 14,499 99 |
| The reduction in three months and twenty days has been | | 5,350 87 |

The present fee is sufficient, and will probably furnish a small surplus in excess of all expenses.

The increased inspection in 1881 over 1880 is 38,291 barrels, or more than 40 per cent.

Doubtless the stock of oil now in the State is larger than it was one year ago; but the lower price prevailing during last fall and the present winter has caused increased consumption. The amendment to the law requiring the inspection of all oil used for illuminating as well as heating purposes has added very materially to the inspection.

Very few accidents have occurred by the use of kerosene oil in the State during the last year. A few fires have occurred where their origin could not be determined, and reports have gained circulation that they were caused by lamp explosions. In December a destructive fire occurred in West Bay City. Newspapers reported that it was caused by a lamp explosion. Deputy Inspector Weller made an investigation. He found the man who was last at the shop where the fire originated, and was told by him that there was no lamp burning in the room where the fire started at the time; that he had turned it out more than two hours before the fire was discovered. The general impression seemed to be that the fire was caused by the lamp in some way, more because it could

not be accounted for in any other way than from any attainable facts. A few fires have been caused by lamps being broken—very few, if any, by explosion.

If lamps, burners, and wicks are in good order, there is no danger from lamp explosions with our present test. Gross carelessness may endanger lives and property.

A fire occurred in Detroit last February, caused by the explosion of a bottle of oil which was set down close to a red hot stove. The oil expanded, exploded, and the house was burned up in consequence of this reckless carelessness. No oil is proof against such acts of stupidity as this.

In the year 1880 only one life was lost in the State by the use of kerosene oil, and as I stated in my last report, this was caused by pouring oil on a fire to quicken its burning. No accident of this kind has occurred during the year 1881.

Only one life has been lost by the use of kerosene oil during the past year. Mrs. Curtis was burned to death at Lapeer in the month of January. The circumstances connected with her death are shrouded in mystery. The case has been judicially investigated. The jury concluded that the burning was caused by an accident. A few days after the death of Mrs. Curtis, Deputy Inspector Willett was instructed to go to Lapeer and collect all the attainable facts bearing upon the case, and report them to me. He found that the lamp was filled, and had been burning a little over two hours before the fire was discovered; that the lamp was found on the floor broken, the burner removed from the lamp, with the thread of the screw on the burner and socket uninjured. A sample of the oil was procured and tested. It flashed at 122°. Whatever may have been the cause, it hardly seems possible that it was caused by an explosion. An explosion could not have occurred with the burner off or placed on the lamp so loosely that it would have fallen off. In that case the heated or burning vapor would have escaped without causing an explosion. If an explosion had taken place, the burner would have been found fast in the socket. If it were otherwise, oil inspection would be a dangerous business. The aperture for the escaping vapor is larger in a lamp than it is in the Board of Health testing cup; and still we are constantly applying the lighted taper to the vapor arising from the heated oil in the cup with entire safety. We know that an explosion cannot be caused in this way.

In one case a slight accident occurred by filling a lamp too full. It was filled so full that the burner was pressed down upon the cold oil.

As the temperature of the oil was increased, it expanded and broke the lamp. The fire was extinguished without much harm being done. But this could not have been the case with a lamp that had been burning over two hours.

Whatever may have been the cause of the death of Mrs. Curtis, we think that two and a half years' use of our present test oil has demonstrated the fact that it is entirely safe with the exercise of reasonable care in its use.

I have been much pleased to note much less complaint in regard to the illuminating character of the oil for the last year than formerly. During the extreme cold weather of last winter, some complaint was made in regard to the quality of some of the legal test oil. It congealed, and troubled the consumer to some extent. Have heard of but one complaint of this character this winter. Have never heard of any complaint in regard to water-white oil. There was more complaint the first six months that the present law was in force than there has been for the two years since. I think better wicks are

being used, and more care observed in the use of the lamps. This is of great importance; no oil will afford a good light with a bad wick, nor with the holes in the perforated plate stopped up with burnt wick, cinders, or other obstructions.

More oil has been rejected this than last year. A greater variety of refiners have been shipping oil into the State. Some of them have not provided themselves with our testing cup, and inspect with some other cup, and guess at the difference. They sometimes make a mistake in their estimate, and send in oil below our legal test. We seldom have difficulty of this kind with refiners who have procured our cup. Manufacturers and dealers are respectfully reminded that our legislature has made the law, and we execute it. If the oil is only one degree below the standard, it must be rejected. We have no option in the case, simply a plain duty to perform. All manufacturers for a Michigan market will do well to provide themselves with the Michigan Board of Health testing cup.

For the convenience of all parties interested, the law and instructions to deputy inspectors are again published with this report.

Respectfully submitted, this 20th day of January, 1882.

C. G. LUCE,
*State Oil Inspector.*

# THE OIL INSPECTION LAW.

[Act No. 127, Laws of 1879, as amended by Act 49, Laws of 1881]

AN ACT to provide for the inspection of illuminating oils manufactured from petroleum or coal oils, and to repeal act number one hundred and eighty-one of the session laws of one thousand eight hundred and seventy-five, approved May first, one thousand eight hundred and seventy-five, and act number one hundred and ninety-six of the session laws of one thousand eight hundred and seventy-seven, approved May twenty-second, one thousand eight hundred and seventy-seven.

SECTION 1. *The People of the State of Michigan enact,* That the Governor shall appoint a suitable person, resident of this State, who is not interested in manufacturing, dealing in, or vending any illuminating oils manufactured from petroleum, as State inspector of oils, whose term of office shall be two years from [the] date of appointment, or until his successor shall be appointed or shall qualify. It shall be the duty of said State inspector, or his deputies hereinafter provided, to examine and test the quality of all such oils offered for sale by any manufacturer, vendor, or dealer, and if, upon such testing or examination, the oils shall meet the requirement hereinafter specified, he shall fix his brand or device, viz.: "approved," with the date over his official signature upon the package, barrel or cask, containing the same. And to more effectually carry out the provisions of this act, it shall be lawful for the State inspector, or his deputies, to enter into or upon the premises of any manufacturer, vendor, or dealer of said oils, and if they shall find or discover any kerosene oil, or any other product of petroleum that has not been inspected and branded, according to the provisions of this act, they shall proceed to inspect and brand the same. And it shall be lawful for any manufacturer, vendor, or dealer, to sell the oil so tested and approved as an illuminator; but if the oil or other product of petroleum so tested shall not meet said requirements, he shall mark in plain letters on said package, barrel, or cask, over his official signature, the words: "Rejected for illuminating purposes;" and it shall be unlawful for the owner thereof to sell such oil or other product of petroleum, for illuminating purposes; and if any person shall sell or offer for sale such rejected oil, or other product of petroleum, for such purpose, he shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be subject to a penalty, in the discretion of the court, in any sum not exceeding three hundred dollars.

SEC. 2. The State inspector provided for in this act is hereby empowered to appoint a suitable number of deputies, which deputies are hereby empowered to perform the duties of inspection, and shall be liable to the same penalties as

the State inspector: *Provided,* That the State inspector may remove any of said deputies for reasonable cause. It shall be the duty of the inspector and his deputies to provide themselves, at their own expense, with the necessary instruments and apparatus for testing the quality of said illuminating oils, and when called upon for that purpose, to promptly inspect all oils hereinbefore mentioned, and to reject, for illuminating purposes, all oils which will emit a combustible vapor at the temperature of one hundred and twenty degrees of Fahrenheit's thermometer: *Provided,* The quantity of oil used in the flash test shall not be less than half a pint. The oil tester adopted and recommended by the Michigan State board of health shall be used by the inspector and his deputies.

SEC. 3. Every person appointed a State inspector shall, before he enters upon the discharge of the duties of his office, take an oath or affirmation prescribed by the constitution and laws of this State, and shall file the same in the office of the Secretary of State. The State inspector shall execute a bond to the State of Michigan, in such sum and with such surety as shall be approved by the Secretary of State, conditioned for the faithful performance of the duties imposed upon him by this act, which bond shall be for the use of all persons aggrieved by the acts or neglect of said inspector; and the same shall be filed with the Secretary of State. The deputy inspector shall, before he enters upon the duties of his office, take such oath and file such bond, with like conditions as is required of the State inspector, said bond to be in such sum as shall be required by the State inspector, with two sureties to be approved by the judge of probate, and file such oath and bond with the clerk of the county in which such deputy inspector resides. Such deputy shall also forward the county clerk's certificate of such filing to said State inspector. Said inspectors shall collect sixteen cents for each barrel, or cask, or package containing not exceeding fifty-five gallons, and at the same proportionate rate for any excess over that quantity so inspected, and he shall pay over to the State inspector at the commencement of each month, all moneys received by him for inspection, and in any case of inspection or branding, said fee shall be a lien on the oil so inspected. It shall also be the duty of every inspector or deputy inspector to keep a true and accurate record of all oils so inspected and branded by him, which record shall state the date of inspection, the number of gallons rejected, the number of gallons approved, the number of gallons inspected, the number and kind of barrels, casks, or packages, the name of the person for whom inspected, and the money received for such inspection, and said record shall be open to the inspection of all persons interested. It shall also be the duty of every deputy inspector, at the commencement of each month, to forward to the State inspector and board of State auditors, true duplicate copies of such record for the preceding month. In the month of January, in each year, the State inspector shall make and deliver to the Governor of the State and board of public health, annual duplicate reports of the inspections by himself and deputies during the preceding calendar year. All illuminating oils manufactured or refined in this State shall be inspected before being removed from the manufactory or refinery; and if any person or persons, whether manufacturer, vendor, or dealer, shall sell or attempt to sell, to any person in this State any illuminating oil, whether manufactured in this State or not, before having the same inspected, as provided in this act, he shall be deemed guilty of a misdemeanor, and he shall be subject to a penalty in any sum not exceeding three hundred dollars; and if any manufacturer, vendor, or dealer in either or any

of said illuminating oils, shall falsely brand the package, cask, or barrel containing the same, as provided in sections one and two of this act, or shall use packages, casks, or barrels having the inspector's brand thereon, without having the oil inspected, he shall be deemed guilty of a misdemeanor, and he shall be subject to a penalty in any sum not exceeding three hundred dollars nor less than one hundred dollars, or be imprisoned in the county jail not exceeding six months, or both, at the discretion of the court.[1]

SEC. 4. Any person selling or dealing in illuminating oils produced from petroleum, who shall sell or dispose of any empty kerosene barrels [barrel], cask, or package, before thoroughly canceling, removing, or effacing the inspection brand on the same, shall be guilty of a misdemeanor, and on conviction shall pay a fine of one dollar for each barrel, cask, or package thus sold or disposed of; and any person who shall knowingly use any illuminating oil or products of petroleum for illuminating or heating purposes before the same has been inspected and approved by the State inspector of oils or his deputy, shall be guilty of a misdemeanor, and on conviction, shall pay a fine in any sum not exceeding ten dollars for each offense.[1]

SEC. 5. No person shall adulterate with paraffine or other substance for the purpose of sale or for use, any coal or kerosene oils to be used for lights in such a manner as to render them dangerous to use, nor shall any person knowingly sell or offer to sell, or knowingly use such adulterated oil, nor shall any person knowingly sell or offer for sale, or knowingly use any coal or kerosene oil, or any of the products thereof for illuminating purposes, which by reason of being adulterated, or for any other reason, will emit a combustible vapor at a temperature less than one hundred and twenty degrees of Fahrenheit's thermometer: *Provided*, That the quantity used in the test shall not be less than one-half pint: *And further provided*, That the gas or vapor from said oils may be used for illuminating purposes, when the oils from which said gas or vapor is generated are contained in closed reservoirs outside the building illuminated or lighted by said gas. Any person violating the provisions of this section shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished by imprisonment in the county jail, not more than one year, or by fine not exceeding four hundred dollars, or by both such fine and imprisonment in the discretion of the court: *Provided*, That nothing in this act shall be so construed as to prevent the use in street lamps of lighter products of petroleum, such as gasoline, benzine, benzole, naphtha: *Provided further*, That the provisions of this act shall not apply to the use of machines or generators constructed on the principle of the "Davy safety lamp."

SEC. 6. The State inspector shall receive an annual salary of fifteen hundred dollars. He shall also be allowed such further sum as he may actually and necessarily expend in traveling expenses and prosecutions incurred in the discharge of his duties. Each deputy inspector shall be entitled to a salary payable monthly, the amount of such salary to be determined by the number of casks, barrels, and packages actually inspected by such deputy inspector during the month as follows: For each of the first ten, one dollar each; for each of the second ten, seventy-five cents; for each of the third ten, sixty cents; for each of the fourth ten, fifty cents; for each of the fifth ten, forty cents; for each of the sixth ten, thirty cents; for each of the seventh ten, twenty-five cents; for each of the eighth ten, twenty cents; for each of the ninth ten, fifteen cents; for each of the tenth ten, ten cents;

[1] As amended by Act No. 49,—1881.

for each of the second hundred, eight cents; for each of the third hundred, six cents; for each in excess of three hundred, five cents: *Provided*, That in no case shall any deputy inspector receive more than one hundred dollars in any month as such salary. Said deputy inspector shall also be entitled to and allowed all actual and necessary expenses for railroad, stage and steamboat fares incurred in the discharge of his duties as such deputy inspector. All salaries and expenses provided for in this act shall be retained by the State inspector out of the money received for inspections of oil, and accounted for and paid out by him as provided in this act: *Provided*, That in case the amount of money received for the inspection of oils according to the provisions of this act shall not be sufficient to pay the compensation and expenses of the inspector and his deputies as provided herein, the amount of such deficiency shall be deducted from said salaries *pro rata* to each.

SEC. 7. The State inspector shall render to the board of State auditors, quarterly, a detailed account of all the receipts and disbursements of his office, to be audited and allowed by them if found correct; and at the end of the year any surplus shall be paid into the State treasury.

SEC. 8. It shall be the duty of the State inspector, or any deputy inspector, who shall know of the violation of any of the provisions of this act, to enter complaint before any court of competent jurisdiction against any person so offending, and in case the State inspector or deputy inspector, have [having] knowledge of the violation of the provisions of this act, shall neglect to enter complaint as required by and provided for in this section, he shall be deemed guilty of a misdemeanor.

SEC. 9. It shall be the duty of all prosecuting attorneys to represent and prosecute in behalf of the people, within their respective counties, all cases of offenses arising under the provisions of this act.

SEC. 10. No inspector or deputy inspector shall, while in office, traffic directly or indirectly in any article which he is appointed to inspect. For the violation of any of the provisions of this act, he shall be liable to a penalty not to exceed three hundred dollars.

SEC. 11. It shall be the duty of the Governor to remove from office, and to appoint a competent person, in the place of any inspector who is unfaithful in the duties of his office.

SEC. 12. Act number one hundred and eighty-one of the session laws of eighteen hundred and seventy-five, as approved May first, eighteen hundred and seventy-five, and act number one hundred and ninety-six of the session laws of eighteen hundred and seventy-seven, as approved May twenty-third, eighteen hundred and seventy-seven, are hereby repealed.

SEC. 13. This act shall take effect thirty days from and after its approval by the Governor.

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**This amended act takes effect the 11th day of September, 1881.**

# INSTRUCTIONS TO DEPUTIES.

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OFFICE OF STATE INSPECTOR OF ILLUMINATING OILS FOR MICHIGAN,
*Gilead, Branch County, Mich., Jan. 20, 1882.*

*To the Deputy Inspectors of Illuminating Oils:*

GENTLEMEN,—You will please observe the following directions in the discharge of your official duties under act No. 127 of session laws of 1879, approved May 31, 1879, a copy of which is herewith annexed.

I. Provide yourselves with the State Board of Health tester, as required by the act, and brands hereinafter described.

II. In using the tester, remove the upper cup and pour in water enough to fill the space between the first and second cups. Replace the upper cup and pour enough of the oil to be tested into the upper cup to fill it to the edge of the flange. Pass the supporting rod through the smallest hole in the cover and insert the rod in the socket on the inside of the cup. Place the bulb of the thermometer in the smaller of the remaining holes in the cover and attach the loop to the hook of the supporting rod. The oil should just cover the bulb of the thermometer. Fill the small lamp with alcohol, and trim the wick so that it will burn with a small flame. The temperature of the oil should not rise more than 3° a minute. To ascertain the flashing point, insert a lighted taper into the largest hole in the cover, rapidly bringing the flame into the space well under the cover and above the oil. Continue to do this with every increase of temperature of 2° or 3° till the vapor burns with a puff and bluish flame. The lowest temperature at which the vapor will thus burn is called the flashing point. If this flash takes place at 120° or under you must brand the barrels or casks rejected for illuminating purposes. If at above 120° you must brand the casks or barrels approved, as the law directs.*

III. The approved brand must be made similar to the following pattern, with adjustable dates, measuring seven inches from border to border, and with ample margin to protect the barrel from the stencil brush.

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* When oil flashes very close to the legal test, either above or below, great care must be used to secure accuracy.

IV. The brand for rejected oil must be square in form, measuring seven inches from border to border, bearing the name of the inspector, but will not require date.

V. The inspector will adjust the dates so that the brand will show the date of inspection of all oil approved.

VI. Brand on the gauge end in bright colors. These brands are your official signature and you cannot permit their use by others. You must brand the barrels yourselves or have it done under your supervision.

VII. The fees are sixteen cents for each barrel, cask or package containing not exceeding 55 gallons, and at the same proportionate rate for any excess over that quantity. This fee is made a lien upon the oil inspected, and you are made responsible for its collection. A receipt must be given and a full entry made upon the stub blank receipt books, which will be furnished you from this office. When all of the recepts in a book are used return the stubs to me.

VIII. Blank monthly reports will be furnished you. Make full reports to me *promptly* on the first day of each month. Remit collections in draft on New York, Detroit, or Chicago, endorsed by yourself. It is very important that the reports be made promptly on the first day of each month, as I cannot make monthly settlements until *all* reports are received.

IX. I desire to call your attention to the fact that it is not only your duty to inspect promptly when called upon to do so by dealer or manufacturer, but it is also your duty to be watchful. Be on the alert. See that no oil escapes inspection. See that the inspection brands are canceled before the barrels are removed. Call the attention of dealers to this provision of the law. Enforce it rigidly. This a part of your duty. Execute all of the provisions of the law with care and fidelity. Be courteous under all circumstances. If accidents occur in your district from the use of kerosene oil ascertain all the facts and circumstances, and report them to me promptly. Study the law carefully that you may be able to comply with all of its provisions. Report to me before your blanks are exhausted, so that you can be supplied with more.

Very truly yours,

CYRUS G. LUCE,
*State Oil Inspector.*

ELEVENTH ABSTRACT

OF THE

# ANNUAL REPORTS

OF THE

# COUNTY SUPERINTENDENTS OF THE POOR

OF THE

# STATE OF MICHIGAN.

SEPTEMBER 30, 1881.

BY AUTHORITY.

LANSING:
W. S. GEORGE & CO., STATE PRINTERS AND BINDERS.
1882.

# ABSTRACT.

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DEPARTMENT OF STATE,
*Lansing, May 25, 1882.*

*Hon. David H. Jerome, Governor of the State of Michigan:*

SIR:—As required by law, I submit herewith the Eleventh Annual Abstract of the Reports of the Superintendents of the Poor, it being for the year ending September 30, 1881.

Very respectfully,

WILLIAM JENNEY,

*Secretary of State.*

# THE DISTINCTION BETWEEN COUNTY AND TOWNSHIP POOR.

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List of counties, so far as reported, in which a distinction is made between county and township poor:

| | | | |
|---|---|---|---|
| Berrien, | Jackson, | Ontonagon, | Schoolcraft, |
| Charlevoix, | Kalkaska, | Roscommon, | Washtenaw, |
| Grand Traverse, | Kent, | Saginaw, | Wayne. |
| Ingham, | Muskegon, | | |

List of counties, so far as reported, in which no distinction is made between county and township poor:

| | | | |
|---|---|---|---|
| Alcona, | Clinton, | Kalamazoo, | Mecosta, |
| Allegan, | Crawford, | Keweenaw, | Missaukee, |
| Alpena, | Delta, | Lake, | Monroe, |
| Antrim, | Genesee, | Lapeer, | Montcalm, |
| Bay, | Gladwin, | Leelanaw, | Newaygo, |
| Benzie, | Gratiot, | Lenawee, | Oakland, |
| Branch, | Hillsdale, | Livingston, | Ogemaw, |
| Calhoun, | Huron, | Mackinac, | Ottawa, |
| Cass, | Ionia, | Manistee, | Sanilac, |
| Chippewa, | Iosco, | Marquette, | St. Clair, |
| Clare, | Isabella, | Mason, | Tuscola. |

List of counties from which no report has been received relative to the distinction between county and township poor:

| | | | |
|---|---|---|---|
| Baraga, | Houghton, | Oceana, | Shiawassee, |
| Barry, | Macomb, | Osceola, | St. Joseph, |
| Cheboygan, | Menominee, | Oscoda, | Van Buren, |
| Eaton, | Midland, | Otsego, | Wexford. |
| Emmet, | Montmorency, | Presque Isle, | |

## EXHIBIT A.

*Statements concerning the Paupers and Indigent Persons in Michigan, for the years ending September 30, 1881, 1880, 1879, 1878, and 1877.*

| | 1881. | 1880. | 1879. | 1878. | 1877. |
|---|---|---|---|---|---|
| **PAUPERS MAINTAINED IN THE POOR-HOUSES.** | | | | | |
| Average number | 1,927.76 | 1,884.55 | 1,975.70 | 2,069.62 | 2,018.32 |
| Per cent of average number to total population in 1874 | ..... | ..... | ..... | ..... | .15 |
| Whole number | 5,880 | 6,547 | *a* 7,806 | 7,078 | 6,356 |
| Number of males | 4,303 | 5,115 | 6,246 | 5,625 | 4,689 |
| Number of females | 1,577 | 1,432 | 1,415 | 1,453 | 1,667 |
| Number under 16 years of age | 684 | 701 | 661 | 743 | 819 |
| Whole number of insane | 479 | 430 | 443 | 523 | 552 |
| Average number of insane | 346.77 | 334.04 | 348.03 | 410.54 | 393.61 |
| Whole number of idiotic | 228 | 221 | 217 | 203 | 252 |
| Average number of idiotic | 196.35 | 196.74 | 200.53 | 190.41 | 234.06 |
| Whole number of blind | 54 | 57 | 50 | 53 | 49 |
| Average number of blind | 41.05 | 49.87 | 47.87 | 45.43 | 42.86 |
| Whole number of mutes | 28 | 27 | 22 | 25 | 17 |
| Average number of mutes | 25.18 | 23.73 | 20.25 | 23.02 | 15.34 |
| Americans | 2,909 | 3,575 | 4,163 | 3,652 | 2,874 |
| English | 311 | 417 | 432 | 411 | 322 |
| Irish | 952 | 1,087 | 1,431 | 1,268 | 1,434 |
| Scotch | 151 | 181 | 194 | 155 | 138 |
| Germans | 580 | 550 | 672 | 791 | 766 |
| French | 145 | 116 | 141 | 115 | 160 |
| Swedes and Norwegians | 76 | 64 | 66 | 93 | 99 |
| Canadians | 338 | 309 | 351 | 345 | 290 |
| Negroes | 53 | 136 | 30 | 93 | 125 |
| Mulattoes | 151 | 22 | 44 | 80 | 50 |
| Indians | 12 | 9 | 17 | 12 | 14 |
| Danes | 9 | 7 | 11 | 8 | 14 |
| Hollanders | 19 | 10 | 24 | 22 | 15 |
| Miscellaneous | 27 | 13 | 25 | 14 | 27 |
| Unknown | 147 | 51 | 60 | 19 | 28 |
| Totals | 5,880 | 6,547 | 7,806 | 7,078 | 6,356 |

| | | | | | |
|---|---|---|---|---|---|
| Births | 97 | 75 | 75 | 86 | 91 |
| Illegitimate births | 79 | 54 | 56 | 62 | 68 |
| Deaths | 288 | 229 | 243 | 215 | 269 |
| **INDIGENT PERSONS ASSISTED OUTSIDE THE POOR-HOUSES.** | | | | | |
| Temporarily relieved | 35,660 | 33,202 | 34,379 | 35,748 | 43,168 |
| Number of permanent paupers maintained outside the poorhouses | 3,797 | 1,133 | 1,950 | 1,272 | 1,309 |
| Insane at Asylums | 542 | 665 | 725 | 735 | 619 |
| Deaf and dumb at Flint Institute | 57 | 38 | 25 | 25 | 23 |
| Blind at Lansing and Flint Institutes | 13 | 13 | 14 | 6 | 10 |
| Poor persons at other institutions | 108 | 27 | 28 | 22 | 102 |
| Whole number of different persons who have received assistance in any form | 42,739 | 40,879 | 45,154 | 42,557 | 54,001 |
| **EXPENDITURES—TOTALS.** | | | | | |
| Whole amount expended in the care and support of the poor | $637,273 73 | $628,129 26 | $650,290 01 | $673,591 28 | $670,431 51 |
| Whole amount paid from poor funds | 443,559 17 | 452,667 50 | 478,692 55 | 486,707 26 | 486,709 18 |
| Amount paid from other funds | 166,850 92 | 172,070 53 | 171,498 07 | 184,517 00 | 157,939 95 |
| **POOR-HOUSE AND POOR-FARM EXPENSES, EXCLUSIVE OF INTEREST ON CAPITAL INVESTED.** | | | | | |
| Totals | $194,266 21 | $197,751 56 | $208,597 12 | $199,742 07 | $203,248 66 |
| Paid to keepers | $33,205 36 | $33,146 77 | $32,292 05 | $31,523 57 | $32,350 84 |
| Clothing purchased | 17,323 46 | 19,097 38 | 20,930 23 | 20,178 01 | 21,385 36 |
| Food purchased | 52,409 37 | 50,477 02 | 47,545 55 | 52,665 30 | 62,070 89 |
| Medical attendance and medicines | 10,418 62 | 9,218 52 | 9,666 49 | 10,009 04 | 10,797 58 |
| Funeral expenses | 1,285 41 | 951 46 | 1,150 04 | 2,211 77 | 1,215 85 |
| Transportation of paupers to and from the poorhouses | 3,047 18 | 2,554 05 | 2,177 26 | 2,990 32 | 3,826 85 |
| Furniture purchased | 4,724 16 | 5,415 88 | 4,158 27 | 4,398 89 | 5,098 63 |
| Labor hired in poorhouses | 9,009 82 | 8,273 07 | 7,509 68 | 6,959 24 | 7,511 23 |
| Miscellaneous poorhouse expenses | 10,597 94 | 8,969 89 | 12,490 05 | 11,056 60 | 8,561 51 |
| Farms purchased | 1,348 28 | 1,012 00 | 4,000 00 | 3,285 44 | 1,850 00 |
| Buildings erected | 9,367 85 | 16,302 97 | 24,276 86 | 14,700 99 | 10,267 20 |
| Buildings repaired | 9,170 77 | 10,877 69 | 9,687 99 | 7,318 56 | 6,963 64 |
| Improvement of farms | 5,630 53 | 3,244 97 | 4,330 79 | 7,098 03 | 5,063 11 |
| Stock purchased | 5,458 25 | 3,787 55 | 4,840 89 | 3,743 32 | 3,565 10 |

a Includes 145 tramps whose sex is not reported.

EXHIBIT A—CONTINUED.

| | 1881. | 1880. | 1879. | 1878. | 1877. |
|---|---|---|---|---|---|
| Farm implements purchased | $3,135 33 | $4,338 12 | $4,103 73 | $2,751 13 | $3,096 09 |
| Hay, grain, and seed purchased | 5,313 55 | 4,784 90 | 3,601 60 | 4,131 81 | 5,065 93 |
| Labor hired on farms | 10,424 53 | 9,538 15 | 10,353 62 | 9,810 84 | 9,358 90 |
| Miscellaneous farm expenses | 5,095 80 | 5,761 17 | 5,482 02 | 4,909 21 | 5,199 95 |
| Average cost of each pauper in the poorhouses within the year | $33 04 | $30 20 | $26 72 | $28 22 | $31 99 |
| Average cost per week of each pauper maintained in the poorhouses during the year | 1 94 | 2 02 | 2 02 | 1 86 | 1 94 |
| Average cost per week of each pauper after deducting value of farms purchased and buildings erected | 1 83 | 1 84 | 1 74 | 1 69 | ..... |
| EXPENDITURES FOR TEMPORARY RELIEF OUTSIDE THE POORHOUSES. | | | | | |
| Totals | $295,940 45 | $259,608 27 | $272,258 03 | $279,670 70 | $327,367 79 |
| Medical attendance and medicines | $57,716 66 | $50,959 11 | $52,236 75 | $45,595 52 | $37,201 78 |
| Funeral expenses | 15,599 19 | 14,689 31 | 13,989 31 | 9,974 94 | 10,589 00 |
| Food purchased | 139,453 80 | 126,609 01 | 138,345 33 | 154,252 90 | 156,770 70 |
| Fuel purchased | 27,014 54 | 18,729 06 | 20,010 56 | 18,807 24 | 11,506 72 |
| Clothing purchased | 17,660 50 | 14,839 65 | 18,731 38 | 15,935 73 | 15,577 42 |
| Miscellaneous expenditures | 26,765 10 | 25,519 58 | 29,824 03 | 32,581 34 | 31,728 86 |
| Transportation (anywhere except to and from poorhouses and to and from public institutions) | 9,241 93 | 8,602 63 | 8,796 79 | 10,673 73 | 12,193 40 |
| Cost of maintaining permanent paupers outside of poorhouses | $17,546 08 | $21,277 04 | $21,751 93 | $18,615 99 | $4,104 42 |
| OTHER EXPENDITURES. | | | | | |
| Totals | $129,515 93 | $149,598 42 | $144,698 51 | $175,371 17 | $135,286 76 |
| Paid superintendents of the poor | $27,487 06 | $27,710 56 | $25,104 96 | $26,498 69 | $25,324 60 |
| Paid supervisors | 4,840 29 | 5,286 92 | 4,942 10 | 4,717 99 | 4,312 84 |
| Paid justices of the peace | 28 25 | 43 70 | 11 31 | 188 72 | 405 35 |
| Paid directors of the poor | 4,192 24 | 3,087 11 | 3,161 55 | 3,167 50 | 2,512 75 |
| Paid for transportation to and from and support of insane at asylums | 86,426 66 | 106,610 67 | 103,802 19 | 133,822 89 | 97,679 48 |
| Paid for transportation to and from and support of deaf and dumb at Flint Institute | 1,676 02 | 624 11 | 665 72 | 673 02 | 357 16 |

| | | | | | |
|---|---|---|---|---|---|
| Paid for transportation to and from and support of blind at Lansing and Flint Institutes | 434 89 | 802 13 | 252 22 | 171 92 | 90 81 |
| Paid for transportation to and from and support of poor persons at other institutions | 4,387 67 | 5,325 93 | 6,698 46 | 5,470 70 | 4,603 77 |
| Value of paupers' labor (estimated) | $8,030 15 | $8,350 00 | $8,320 00 | $7,742 00 | $8,476 00 |
| Value of all farm products (estimated) | 80,443 92 | 69,754 10 | 65,847 16 | 59,654 01 | 60,382 63 |
| Value of farm products sold | 17,647 95 | 16,662 55 | 14,871 22 | 12,365 07 | 13,670 89 |
| Per cent of value of farm products to capital invested in farms and appurtenances | 10.67 | 9.74 | 9.53 | 9.11 | 9.81 |
| Total value of farms and appurtenances | $760,200 49 | $737,148 00 | $707,771 27 | $693,215 46 | $726,271 91 |
| Value of farms and buildings | $669,164 00 | $655,358 50 | $635,590 00 | $621,706 06 | $634,060 86 |
| Value of live stock | 45,260 40 | 40,782 40 | 37,688 34 | 38,671 90 | 39,939 25 |
| Value of farm implements | 18,500 82 | 19,448 55 | 17,242 65 | 16,173 49 | 17,260 17 |
| Value of all other property | 25,025 27 | 21,558 55 | 17,250 28 | 16,664 01 | 34,294 38 |
| Interest at seven per cent on capital invested in farms and appurtenances | $53,393 62 | $51,600 36 | $49,543 99 | $48,525 08 | $50,839 03 |

## TABLE I.

*Showing, for the State and Counties, the Average Number, the Whole Number, the Number of Each Sex, and the Number under 16 years of age, of Paupers maintained in the Poor-houses; and of these the Whole Number and the Average Number that are Insane, Idiotic, Blind, and Mute, for the year ending September 30, 1881.*

| STATE AND COUNTIES. | PAUPERS MAINTAINED IN THE POOR-HOUSES. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | INSANE. | | IDIOTIC. | | BLIND. | | MUTE. | |
| | Average Number. | Whole Number. | Number of Males. | Number of Females. | Number under 16 Years of Age. | Whole Number. | Average Number. | Whole Number. | Average Number. | Whole Number. | Average Number. | Whole Number. | Average Number. |
| STATE | 1,927.76 | 5,880 | 4,303 | 1,577 | 684 | 479 | 346.77 | 228 | 196.35 | 54 | 41.05 | 28 | 25.18 |
| Alcona | 2.50 | 6 | 4 | 2 | | | | | | | | | |
| Allegan | 53. | 87 | 49 | 38 | 16 | 12 | 10. | 2 | 2. | | | 1 | 1. |
| Alpena | 7.07 | 33 | 27 | 6 | 5 | 1 | 1. | | | | | | |
| Antrim [1] | | | | | | | | | | | | | |
| Baraga [1] | | | | | | | | | | | | | |
| Barry | 14.75 | 32 | 20 | 12 | 7 | | | 6 | 5. | | | | |
| Bay | 15.25 | 127 | 100 | 27 | 13 | 7 | 6. | 2 | 2. | | | | |
| Benzie [1] | | | | | | | | | | | | | |
| Berrien | 46. | 92 | 52 | 40 | 27 | 8 | 4.06 | 13 | 10.50 | 2 | 2. | 2 | 2. |
| Branch | 44. | 68 | 40 | 28 | 15 | 6 | 4. | 4 | 3.50 | 2 | | | |
| Calhoun | 65.92 | 135 | 86 | 49 | 22 | 14 | 11.17 | 4 | 4. | 3 | 2.53 | | |
| Cass | 35.50 | 56 | 35 | 21 | 14 | 7 | 5.17 | 8 | 8. | | | | |
| Charlevoix [1] | | | | | | | | | | | | | |
| Cheboygan [2] | | | | | | | | | | | | | |
| Chippewa [1] | | | | | | | | | | | | | |
| Clare | 1.64 | 13 | 10 | 3 | 3 | | | 1 | 1. | | | | |
| Clinton | 18.50 | 32 | 15 | 17 | 4 | 1 | 1. | 4 | 4. | 1 | 1. | 1 | 1. |
| Crawford [1] | | | | | | | | | | | | | |
| Delta [1] | | | | | | | | | | | | | |
| Eaton | 32. | 65 | 48 | 17 | 7 | | | 2 | 2. | | | 1 | 1. |
| Emmet [1] | | | | | | | | | | | | | |
| Genesee | 39.67 | 72 | 41 | 31 | 11 | 5 | 4.50 | 10 | 7.63 | | | 2 | 1.17 |
| Gladwin [1] | | | | | | | | | | | | | |
| G'd Traverse [3] | | | | | | | | | | | | | |
| Gratiot | 20. | 37 | 25 | 12 | 9 | 6 | 3.33 | 8 | 5.67 | | | | |
| Hillsdale | 59. | 79 | 37 | 42 | 11 | 18 | 16. | 8 | 8. | 2 | 2. | 1 | 1. |
| Houghton | 22. | 38 | 26 | 12 | 9 | 7 | 7. | 2 | 2. | 2 | 2. | | |
| Huron | 4.67 | 19 | 13 | 6 | 7 | 1 | .33 | | | 2 | 1. | | |
| Ingham | 44.47 | 87 | 55 | 32 | 17 | 6 | 4.25 | 6 | 4. | 1 | 1. | 2 | 2. |
| Ionia | 42. | 67 | 45 | 22 | 9 | 7 | 5.50 | 7 | 7. | | | 1 | 1. |
| Iosco | 10.67 | 31 | 26 | 5 | 6 | | | 1 | 1. | | | | |
| Isabella | 5.56 | 16 | 12 | 4 | 2 | | | 2 | 1.32 | | | | |
| Isle Royal [4] | | | | | | | | | | | | | |
| Jackson | 23.50 | 52 | 35 | 17 | 6 | 7 | 7. | 3 | 2. | 3 | 2. | | |
| Kalamazoo | 33. | 56 | 29 | 27 | 6 | 6 | 6. | 9 | 9. | 2 | 1.25 | 1 | 1. |

[1] No poorhouse nor farm.
[2] No poorhouse.
[3] Poor-farm has been sold.
[4] No report. In 1880 there were no poor.

TABLE I—CONTINUED.

| COUNTIES. | PAUPERS MAINTAINED IN THE POOR-HOUSES. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | INSANE. | | IDIOTIC. | | BLIND. | | MUTE. | |
| | Average Number. | Whole Number. | Number of Males. | Number of Females. | Number under 16 Years of Age. | Whole Number. | Average Number. | Whole Number. | Average Number. | Whole Number. | Average Number. | Whole Number. | Average Number. |
| Kalkaska | 3.25 | 6 | 3 | 3 | | | | 2 | 2. | | | | |
| Kent | 38.59 | 79 | 56 | 23 | 1 | 10 | 9.62 | 13 | 12.17 | 3 | 1. | | |
| Keweenaw [1] | 6. | 6 | 4 | 2 | | | | | | | | | |
| Lake [2] | | | | | | | | | | | | | |
| Lapeer | 30. | 57. | 36 | 21 | 9 | 1 | 1. | 4 | 4. | 3 | 2. | | |
| Leelanaw [2] | | | | | | | | | | | | | |
| Lenawee | 63. | *a* 130 | 84 | 46 | 1 | 4 | 3. | 2 | 2. | 3 | 3. | 1 | 1. |
| Livingston | 11.85 | 28 | 19 | 9 | 5 | | | 2 | 2. | | | 1 | 1. |
| Mackinac [3] | | | | | | | | | | | | | |
| Macomb | 37.50 | *b* 109 | 89 | 20 | 10 | 12 | 12. | 4 | 4. | 2 | 2. | | |
| Manistee | 15. | 41 | 30 | 11 | 12 | | | | | | | | |
| Manitou [2] | | | | | | | | | | | | | |
| Marquette | 37.33 | 106 | 93 | 13 | 11 | 4 | 2.50 | | | | | | |
| Mason | 8. | 13 | 7 | 6 | 1 | | | 2 | 2. | | | | |
| Mecosta | 14.38 | 43 | 28 | 15 | 16 | 3 | .58 | 1 | 1. | | | | |
| Menominee | 4.44 | 30 | 27 | 3 | | | | | | | | | |
| Midland | 9. | 21 | 10 | 11 | 7 | 4 | 1.20 | | | | | | |
| Missaukee [2] | | | | | | | | | | | | | |
| Monroe | 64. | 118 | 63 | 55 | 40 | 1 | .05 | 10 | 9. | 1 | 1. | 1 | 1. |
| Montcalm | 38. | 94 | 59 | 35 | 26 | 3 | *c* | 9 | *c* | 1 | *c* | | |
| Montmore'cy [4] | | | | | | | | | | | | | |
| Muskegon | 8.50 | 38 | 32 | 6 | 5 | 1 | .05 | 1 | 1. | 1 | .01 | | |
| Newaygo | 8. | 34 | 22 | 12 | 3 | | | 3 | 3. | | | | |
| Oakland | 42.48 | 98 | 55 | 43 | 13 | 17 | 13.48 | 18 | 13.02 | 2 | 2. | 1 | 1. |
| Oceana | 12. | 25 | 19 | 6 | 2 | 3 | 2. | 2 | 2. | | | 1 | 1. |
| Ogemaw [2] | | | | | | | | | | | | | |
| Ontonagon [5] | 2. | 2 | 2 | | | | | | | | | | |
| Osceola | 3. | 11 | 8 | 3 | 2 | | | | | | | | |
| Oscoda [6] | | | | | | | | | | | | | |
| Otsego [2] | | | | | | | | | | | | | |
| Ottawa | 20.50 | 38 | 26 | 12 | 3 | 5 | 5. | 7 | 6. | 2 | 1. | | |
| Presque Isle [2] | | | | | | | | | | | | | |
| Roscommon [2] | | | | | | | | | | | | | |
| Saginaw | 34. | 99 | 73 | 26 | 6 | 3 | 2.50 | 6 | 5.50 | 3 | 2.25 | 2 | 1. |
| Sanilac | 16.10 | 31 | 23 | 8 | 4 | 3 | .29 | 4 | 3.04 | 1 | 1. | 1 | 1. |
| Schoolcraft [2] | | | | | | | | | | | | | |
| Shiawassee | 26. | 38 | 19 | 19 | 7 | 4 | 4. | 7 | 7. | 1 | 1. | 1 | 1. |
| St. Clair | 40.17 | 70 | 56 | 14 | 13 | 4 | 3.19 | | | | | 2 | 1.01 |
| St. Joseph | 33. | 50 | 31 | 19 | 6 | 2 | 1.75 | 1 | 1. | 2 | 1.01 | 1 | 1. |
| Tuscola | 18.33 | 35 | 26 | 9 | 8 | 1 | .25 | | | | | | |
| Van Buren | 28. | 50 | 37 | 13 | 4 | | | *d* 1 | | 1 | 1. | | |
| Washtenaw | 77.67 | 423 | 365 | 58 | 16 | | | 4 | 4. | 1 | 1. | 1 | 1. |
| Wayne | 537. | 2,657 | 2,071 | 586 | 227 | 275 | 188. | 23 | 23. | 7 | 7. | 3 | 3. |
| Wexford [7] | | | | | | | | | | | | | |

[1] No farm. County rents a building which is used as a poorhouse.
[2] No poorhouse nor farm.
[3] No report.
[4] Prosecuting attorney says there are no superintendents of the poor, no poor nor any poorhouse.
[5] On the first of May the poor-farm was rented, since which time the paupers have been taken care of outside the county building.
[6] County clerk says there are no poor, no poorhouse, nor any poor-farm.
[7] Poor-farm was rented a part of the year and finally sold.
*a* Includes 25 tramps. *b* Includes 42 tramps. *c* Not reported. *d* Maintained outside the poorhouse.

## TABLE II.

*Showing, for the State and Counties, the Nationalities of the Paupers maintained in the Poorhouses during the year ending September 30, 1881.*

| STATE AND COUNTIES. | Americans.* | English. | Irish. | Scotch. | Germans. | French. | Swedes and Norwegians. | Canadians. | Negroes.† | Mulattoes.‡ | Indians. | Danes. | Hollanders. | Miscellaneous. | Unknown. | Totals. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | 2,909 | 311 | 952 | 151 | 580 | 145 | *a* 76 | 338 | 53 | 151 | 12 | 9 | 19 | *b* 27 | 147 | 5,880 |
| Alcona | 4 | | | | | | | 2 | | | | | | | | 6 |
| Allegan | 57 | 4 | 6 | 5 | 11 | | | 2 | 1 | 1 | | | | | | 87 |
| Alpena | 7 | 2 | 5 | | 1 | | | 14 | | | | | | *c* 3 | 1 | 33 |
| Barry | 29 | 1 | 2 | | | | | | | | | | | | | 32 |
| Bay | 22 | 10 | 27 | 12 | 6 | 17 | 3 | 24 | | | 3 | | | *d* 3 | | 127 |
| Berrien | 65 | 2 | 9 | | 7 | | | | | 6 | | | 1 | *e* 2 | | 92 |
| Branch | 43 | 2 | 6 | 1 | 10 | 2 | | 1 | | 2 | | | | | 1 | 68 |
| Calhoun | 89 | 5 | 13 | 1 | 16 | | | 2 | 1 | 8 | | | | | | 135 |
| Cass | 46 | | | | 1 | | | 1 | 5 | 3 | | | | | | 56 |
| Clare | 5 | | 2 | | 1 | | | 4 | | 1 | | | | | | 13 |
| Clinton | 26 | | 1 | 1 | 1 | | | 3 | | | | | | | | 32 |
| Eaton | 46 | 3 | 7 | | 4 | 1 | | 4 | | | | | | | | 65 |
| Genesee | 48 | 4 | 13 | 1 | 5 | 1 | | | | | | | | | | 72 |
| Gratiot | 31 | 2 | 2 | 1 | | | | | | 1 | | | | | | 37 |
| Hillsdale | 73 | 2 | 1 | | | | | 1 | 1 | 1 | | | | | | 79 |
| Houghton | 14 | 2 | 7 | | 9 | | 1 | 5 | | | | | | | | 38 |
| Huron | 11 | | | | 1 | 1 | | | | | | | | *c* 5 | 1 | 19 |
| Ingham | 57 | 1 | 11 | 3 | 9 | | | 2 | 4 | | | | | | | 87 |
| Ionia | 52 | | 6 | | 6 | | | 3 | | | | | | | | 67 |
| Iosco | 6 | 5 | 8 | | 1 | | | 10 | | | 1 | | | | | 31 |
| Isabella | 3 | 1 | 6 | 1 | 2 | 2 | | | | | | 1 | | | | 16 |
| Jackson | 23 | 4 | 13 | 1 | 6 | 1 | | | | 4 | | | | | | 52 |
| Kalamazoo | 35 | 4 | 5 | | 6 | | | | | 6 | | | | | | 56 |
| Kalkaska | 3 | | | | 2 | | | 1 | | | | | | | | 6 |
| Kent | 37 | 3 | 13 | 2 | 10 | 1 | 2 | 2 | 2 | | | | 7 | | | 79 |
| Keweenaw | | 2 | 3 | 1 | | | | | | | | | | | | 6 |
| Lapeer | 37 | 2 | 4 | 3 | 3 | | | 8 | | | | | | | | 57 |
| Lenawee | 78 | 4 | 9 | | 7 | 1 | | | 5 | 1 | | | | | *f* 25 | 130 |
| Livingston | 16 | 6 | 3 | | 2 | | | | | | *g* 1 | | | | | 28 |
| Macomb | 43 | 2 | 5 | 3 | 9 | 2 | | 3 | | | | | | | *h* 42 | 109 |
| Manistee | 17 | | 7 | 1 | 5 | 1 | *i* 2 | 2 | | | | 4 | | *c* 2 | | 41 |
| Marquette | 16 | 5 | 30 | 2 | 8 | 1 | 29 | 12 | 1 | | 1 | | | *d* 1 | | 106 |
| Mason | 3 | | 3 | | 2 | 2 | 2 | | | | | | 1 | | | 13 |
| Mecosta | 25 | 1 | 6 | | | | | 6 | | | 5 | | | | | 43 |
| Menominee | 5 | 1 | 6 | | 1 | | *j* 8 | 2 | | | | | | *k* 7 | | 30 |
| Midland | 13 | | 2 | 1 | | | | 5 | | | | | | | | 21 |

* Includes all whites born in the United States.
† Includes only those in whom there appears no mixture of white blood.
‡ Includes all those in whom there appears a mixture of white and negro blood.
*a* Includes 70 Swedes and 6 Norwegians.
*b* Includes 10 Polanders, 6 Italians, 6 Belgians, 2 Swiss, 1 Russian, 1 Welsh, and 1 Australian.
*c* Polanders.
*d* Italians.
*e* Swiss.
*f* Probably tramps.
*g* Half-breed.
*h* Tramps.
*i* Norwegians.
*j* Includes 2 Norwegians.
*k* Includes 5 Belgians, 1 Italian, and 1 Russian.

TABLE II—CONTINUED.

| COUNTIES. | Americans.* | English. | Irish. | Scotch. | Germans. | French. | Swedes and Norwegians. | Canadians. | Negroes.† | Mulattoes.‡ | Indians. | Danes. | Hollanders. | Miscellaneous. | Unknown. | Totals. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Monroe | 60 | 1 | 5 | 2 | 24 | 26 | ---- | ---- | -- | ---- | -- | -- | -- | ---- | ---- | 118 |
| Montcalm | 68 | 1 | 10 | ---- | 7 | 1 | ---- | 3 | -- | ---- | -- | 4 | -- | ---- | ---- | 94 |
| Muskegon | 8 | 1 | 2 | 1 | 7 | 3 | 10 | 2 | -- | ---- | -- | -- | 4 | ---- | ---- | 38 |
| Newaygo | 19 | 1 | 2 | ---- | 2 | 1 | 2 | 3 | -- | ---- | -- | -- | -- | ---- | 4 | 34 |
| Oakland | 52 | 7 | 12 | 3 | 13 | ---- | ---- | 4 | -- | 2 | -- | -- | -- | ---- | 5 | 98 |
| Oceana | 12 | ---- | 4 | ---- | 4 | 2 | *a* 1 | ---- | -- | ---- | -- | -- | -- | *b* 2 | ---- | 25 |
| Ontonagon | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | -- | ---- | -- | -- | -- | ---- | ---- | 2 |
| Osceola | 4 | ---- | 1 | 1 | ---- | ---- | 1 | 4 | -- | ---- | -- | -- | -- | ---- | ---- | 11 |
| Ottawa | 16 | ---- | 9 | ---- | 4 | 2 | ---- | ---- | -- | ---- | 1 | -- | 6 | ---- | ---- | 38 |
| Saginaw | 25 | 4 | 23 | 5 | 22 | 7 | ---- | 12 | -- | ---- | -- | -- | -- | ---- | 1 | 99 |
| Sanilac | 12 | 1 | 6 | ---- | 2 | ---- | ---- | 10 | -- | ---- | -- | -- | -- | ---- | ---- | 31 |
| Shiawassee | 30 | 1 | 2 | 1 | 3 | ---- | ---- | 1 | -- | ---- | -- | -- | -- | ---- | ---- | 38 |
| St. Clair | 23 | 8 | 10 | 1 | 14 | ---- | 3 | 11 | -- | ---- | -- | -- | -- | ---- | ---- | 70 |
| St. Joseph | 40 | 2 | 4 | 1 | 2 | ---- | ---- | 1 | -- | ---- | -- | -- | -- | ---- | ---- | 50 |
| Tuscola | 25 | 1 | 2 | 1 | 1 | 2 | ---- | 3 | -- | ---- | -- | -- | -- | ---- | ---- | 35 |
| Van Buren | 39 | 1 | 5 | 1 | ---- | ---- | *a* 1 | 1 | 1 | ---- | -- | -- | -- | *c* 1 | ---- | 50 |
| Washtenaw | 221 | 30 | 86 | 13 | 43 | 1 | 1 | 22 | 6 | ---- | -- | -- | -- | ---- | ---- | 423 |
| Wayne | 1,170 | 172 | 528 | 80 | 280 | 66 | 10 | 142 | 26 | 115 | -- | -- | -- | *d* 1 | 67 | 2,657 |

* Includes all whites born in the United States.
† Includes only those in whom there appears no mixture of white blood.
‡ Includes all those in whom there appears a mixture of white and negro blood.
*a* Norwegians.
*b* Includes 1 Welsh and 1 Belgian.
*c* An Australian.
*d* Italians.

## TABLE III.

*Showing, for the State and Counties, the Total Number of Births, the number of Illegitimate Births, and the number of Deaths, at the Poorhouses; the number of persons Temporarily Relieved, and the number Permanently Maintained outside of the Poorhouses; the number Supported at Public Institutions, and the whole number of different persons who have received assistance in any form; for the year ending September 30, 1881.*

| STATE AND COUNTIES. | Whole Number of Births and Deaths at the Poor-Houses. | | | Number of Persons Temporarily Relieved outside the Poor-houses. | Number of Permanent Paupers Maintained outside the Poor-houses. | Whole Number of Poor Persons Supported at Public Institutions. | | | | Number of Different Persons who have Received Assistance in any form during the year. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Births. | Illegitimate Births. | Deaths. | | | Insane at Asylums. | Deaf and Dumb at Flint Institute. | Blind at Lansing Institute. | Poor Persons at other Institutions. | |
| STATE | 97 | 79 | 288 | 35,660 | 3,797 | 542 | 57 | 13 | 108 | 42,739 |
| Alcona | ---- | ---- | ------ | 122 | -------- | *a* 2 | ------ | ------ | ------ | 130 |
| Allegan | ---- | ---- | 7 | 537 | -------- | 8 | 2 | ------ | ------ | 634 |
| Alpena | 1 | 1 | 5 | 252 | -------- | 2 | ------ | ------ | ------ | 285 |
| Antrim | ---- | ---- | ------ | 46 | 7 | 3 | ------ | ------ | ------ | 56 |
| Baraga | ---- | ---- | ------ | 46 | -------- | ------ | ------ | ------ | ------ | 46 |
| Barry | ---- | ---- | ------ | 91 | 4 | 12 | 1 | ------ | ------ | 140 |
| Bay | 1 | 1 | 2 | 183 | 2 | 18 | 2 | 2 | ------ | 277 |
| Benzie | ---- | ---- | ------ | 56 | 1 | 1 | ------ | ------ | ------ | 58 |
| Berrien | ---- | ---- | 3 | *b* 500 | -------- | 6 | 4 | ------ | ------ | 592 |
| Branch | 1 | ---- | 4 | 380 | 4 | 6 | 1 | ------ | ------ | 454 |
| Calhoun | 2 | ---- | 5 | 834 | 95 | 12 | 2 | ------ | ------ | 1,085 |
| Cass | 2 | 1 | 1 | 250 | 43 | 4 | 1 | ------ | ------ | 354 |
| Charlevoix | ---- | ---- | ------ | 48 | 2 | ------ | ------ | ------ | ------ | 50 |
| Cheboygan | ---- | ---- | ------ | 78 | 8 | ------ | ------ | ------ | ------ | 86 |
| Chippewa | ---- | ---- | ------ | 111 | 42 | ------ | ------ | ------ | ------ | 153 |
| Clare | ---- | ---- | ------ | 95 | -------- | ------ | ------ | ------ | ------ | 108 |
| Clinton | 1 | 1 | 1 | *c* 71 | 17 | 13 | ------ | ------ | ------ | 123 |
| Crawford | ---- | ---- | ------ | 26 | -------- | ------ | ------ | ------ | ------ | 26 |
| Delta | ---- | ---- | ------ | 102 | 7 | 3 | ------ | ------ | ------ | 112 |
| Eaton | 1 | ---- | 4 | 313 | 15 | 13 | 1 | ------ | ------ | 410 |
| Emmet | ---- | ---- | ------ | 51 | -------- | ------ | ------ | ------ | ------ | 51 |
| Genesee | 2 | 1 | 7 | 1,090 | 105 | 15 | 3 | 1 | *d* 3 | 1,289 |
| Gladwin | ---- | ---- | ------ | 9 | -------- | ------ | ------ | ------ | ------ | 9 |
| Grand Traverse | ---- | ---- | ------ | 12 | 1 | ------ | ------ | ------ | ------ | 13 |
| Gratiot | 2 | 2 | 4 | 271 | -------- | 5 | 1 | ------ | ------ | 314 |
| Hillsdale | ---- | ---- | 8 | *e* 537 | -------- | 8 | ------ | ------ | ------ | 625 |
| Houghton | ---- | ---- | 1 | 450 | 150 | 10 | 2 | ------ | ------ | 650 |
| Huron | 1 | 1 | 2 | 265 | -------- | ------ | ------ | ------ | ------ | 284 |
| Ingham | 1 | 1 | 10 | 597 | -------- | 15 | 1 | 1 | ------ | 701 |
| Ionia | 1 | 1 | 1 | 497 | -------- | 12 | 1 | ------ | ------ | 564 |
| Iosco | ---- | ---- | 1 | 96 | -------- | 2 | ------ | ------ | ------ | 129 |
| Isabella | ---- | ---- | 1 | 130 | 1 | 2 | ------ | ------ | ------ | 146 |
| Jackson | 2 | 2 | 5 | 1,693 | 10 | 20 | ------ | ------ | *f* 3 | 1,778 |

*a* Includes one at Michigan Retreat.
*b* Estimated.
*c* Not a complete report.
*d* One at "Little Sisters' Home," Detroit, and 2 at Reform School for Girls, Adrian.
*e* Includes 284 tramps.
*f* "Little Sisters of the Poor," Detroit.

TABLE III—CONTINUED.

| COUNTIES. | Whole Number of Births and Deaths at the Poor-houses. | | | Number of Persons Temporarily Relieved outside the Poor-houses. | Number of Permanent Paupers Maintained outside the Poor-houses. | Whole Number of Poor Persons Supported at Public Institutions. | | | | Number of Different Persons who have Received Assistance in any form during the year. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Births. | Illegitimate Births. | Deaths. | | | Insane at Asylums. | Deaf and Dumb at Flint Institute. | Blind at Lansing Institute. | Poor Persons at other Institutions. | |
| Kalamazoo | 2 | 2 | 2 | *a* 420 | ..... | 17 | 2 | ..... | ..... | 374 |
| Kalkaska | ..... | ..... | ..... | 18 | 1 | ..... | ..... | ..... | ..... | 25 |
| Kent | ..... | ..... | 4 | 1,355 | 210 | 36 | ..... | ..... | *b* 97 | 1,377 |
| Keweenaw | ..... | ..... | 1 | 101 | 51 | 3 | ..... | ..... | ..... | 110 |
| Lake | ..... | ..... | ..... | 64 | 4 | ..... | ..... | ..... | ..... | 68 |
| Lapeer | 1 | ..... | 4 | 379 | 18 | 9 | 1 | ..... | ..... | 464 |
| Leelanaw | ..... | ..... | ..... | 130 | ..... | ..... | ..... | ..... | ..... | 130 |
| Lenawee | ..... | ..... | 8 | 382 | 3 | 20 | 1 | ..... | *c* 1 | 535 |
| Livingston | ..... | ..... | 1 | 194 | ..... | 9 | ..... | ..... | ..... | 231 |
| Mackinac | ..... | ..... | ..... | 38 | 9 | ..... | ..... | ..... | ..... | 47 |
| Macomb | 1 | 1 | 7 | 754 | ..... | 10 | ..... | ..... | *d* 1 | 947 |
| Manistee | 1 | ..... | 2 | 235 | 2 | 5 | 1 | ..... | ..... | 283 |
| Marquette | 1 | 1 | 8 | 1,043 | ..... | 4 | 1 | ..... | *e* 1 | 1,154 |
| Mason | 1 | 1 | 1 | 180 | ..... | 1 | ..... | 1 | ..... | 193 |
| Mecosta | 2 | 1 | 2 | *f* | ..... | ..... | 9 | ..... | ..... | *f* |
| Menominee | ..... | ..... | 2 | 145 | ..... | 3 | ..... | ..... | ..... | 178 |
| Midland | 1 | 1 | ..... | 122 | ..... | 2 | ..... | ..... | ..... | 145 |
| Missaukee | ..... | ..... | ..... | 13 | ..... | ..... | ..... | ..... | ..... | 13 |
| Monroe | 2 | 1 | 10 | 774 | ..... | *g* | *g* | *g* | ..... | 892 |
| Montcalm | 1 | 1 | 3 | 694 | 5 | 12 | 2 | ..... | ..... | 788 |
| Muskegon | 1 | ..... | 5 | 232 | 18 | 16 | ..... | 1 | ..... | 533 |
| Newaygo | 2 | 2 | 4 | 40 | 7 | 3 | ..... | 1 | ..... | 82 |
| Oakland | 1 | 1 | 6 | 671 | 5 | 16 | ..... | ..... | ..... | 790 |
| Oceana | 1 | 1 | 4 | 152 | 4 | 2 | ..... | ..... | ..... | 100 |
| Ogemaw | ..... | ..... | ..... | 10 | ..... | ..... | ..... | ..... | ..... | 10 |
| Ontonagon | ..... | ..... | ..... | 60 | ..... | ..... | ..... | ..... | ..... | 60 |
| Osceola | ..... | ..... | ..... | 114 | ..... | ..... | ..... | ..... | ..... | 125 |
| Otsego | ..... | ..... | ..... | 11 | ..... | ..... | ..... | ..... | ..... | 11 |
| Ottawa | ..... | ..... | 4 | 311 | 8 | 12 | ..... | 1 | ..... | 585 |
| Roscommon | ..... | ..... | ..... | 32 | ..... | ..... | ..... | ..... | ..... | 32 |
| Saginaw | 3 | 3 | 14 | *h* 1,089 | 1 | 16 | 6 | ..... | ..... | 1,112 |
| Sanilac | ..... | ..... | 3 | 315 | ..... | 3 | ..... | ..... | *d* 2 | 351 |
| Schoolcraft | ..... | ..... | ..... | 11 | ..... | ..... | ..... | ..... | ..... | 11 |
| Shiawassee | 1 | 1 | 2 | *i* 216 | 4 | 4 | ..... | 1 | ..... | 263 |
| St. Clair | 2 | 2 | 5 | 1,003 | ..... | 12 | 4 | 1 | ..... | 1,090 |
| St. Joseph | ..... | ..... | 4 | 435 | 9 | 18 | 1 | ..... | ..... | 513 |
| Tuscola | ..... | ..... | 3 | 340 | ..... | 12 | ..... | ..... | ..... | 387 |
| Van Buren | ..... | ..... | ..... | 465 | 35 | 14 | 6 | 3 | ..... | 573 |
| Washtenaw | 3 | 3 | 12 | 434 | 35 | 33 | 1 | ..... | ..... | 925 |
| Wayne | 52 | 45 | 95 | 12,658 | 2,850 | 58 | ..... | ..... | *j* | 15,315 |
| Wexford | ..... | ..... | ..... | 181 | 4 | ..... | ..... | ..... | ..... | 185 |

*a* "Cannot tell exactly, as supervisors do not make returns."
*b* "At St. Mark's Home 14, at Union Benevolent Home 82, and at Sisters of Charity 1."
*c* Hillsdale poorhouse.
*d* Harper's Hospital.
*e* Michigan Retreat.
*f* "Not reported by supervisors."
*g* "Not known."
*h* Includes 802 "supported at their homes by supervisors and directors of the poor."
*i* Not a complete report.
*j* "None but sick at hospital in the city of Detroit—number not known."

## TABLE IV.

*The assigned causes of pauperism of the inmates of the poorhouses.*

| | | | |
|---|---|---|---|
| Intemperance | 106 | Loss of father | 3 |
| Intemperance and old age | 9 | Imprisonment of father | 3 |
| Intemperance of parents | 1 | Laziness of father | 2 |
| Intemperance of father | 6 | Insanity of mother | 1 |
| Intemperance of husband | 2 | Desertion by mother | 5 |
| Intemperance and licentiousness | 2 | Desertion by father | 25 |
| Intemperance and laziness | 2 | Incompetency of parents | 2 |
| Blindness—whisky | 1 | Sickness of parents | 2 |
| Intemperance and consumption | 1 | Widows' children | 3 |
| Intemperance and rheumatism | 1 | Children of inmates | 64 |
| Intemperance and being crippled | 2 | Born in poorhouse | 9 |
| Intemperance and loss of leg | 1 | Deserted children | 32 |
| Intemperance and bruised hip | 1 | Deserted | 24 |
| Breaking of leg—drunk | 1 | Being homeless | 4 |
| Whisky—frozen feet | 1 | Desertion by husband | 21 |
| Intemperance and wound | 3 | Sickness and desertion by husband | 1 |
| Shot when drunk | 1 | Separation from husband | 1 |
| Whisky and opium | 1 | Sickness of husband | 1 |
| Opium eating | 1 | Insanity of husband | 1 |
| Opium eating and being crippled | 1 | Imprisonment of husband | 1 |
| Criminality | 1 | Shiftlessness of husband | 1 |
| Licentiousness | 5 | Abuse by husband | 1 |
| Licentiousness of mother | 2 | Pregnancy | 22 |
| Prostitution | 12 | Confinement | 9 |
| Prostitution of mother | 2 | Imbecility and childbirth | 1 |
| Bastardy | 6 | A mother | 1 |
| Illegitimate children | 17 | Widowhood | 9 |
| Depravity | 4 | Wives of inmates | 3 |
| Ugliness | 5 | Helpless | 1 |
| Venereal disease | 15 | Idiocy | 124 |
| Masturbation | 8 | Idiocy and deformity | 2 |
| Seduction | 4 | Being idiotic and crippled | 3 |
| Vagrancy | 153 | Imbecility | 34 |
| Sick tramps | 3 | Incompetency | 34 |
| Spendthrift | 1 | Weakness of mind | 111 |
| Laziness | 15 | Blindness | 61 |
| Old age | 295 | Being blind and foolish | 1 |
| Old age and being defrauded | 1 | Blindness and rheumatism | 1 |
| Old age and loss of property | 1 | Deafness | 3 |
| Old age and bad son | 1 | Being deaf and dumb | 10 |
| Old age and blindness | 8 | Being deaf, dumb and almost blind | 1 |
| Old age and insanity | 2 | Being dumb | 5 |
| Old age and sickness | 12 | Defective articulation | 2 |
| Old age and cancer | 1 | Loss of palate | 1 |
| Old age and hernia | 1 | Deformity | 2 |
| Old age and asthma | 1 | General debility | 3 |
| Old age and paralysis | 1 | Infirmity | 7 |
| Old age and rheumatism | 2 | Sickness | 260 |
| Old age and sore leg | 1 | Sickness and sore eyes | 1 |
| Old age and being crippled | 9 | Fever | 7 |
| Old age and deformity | 1 | Malarial fever | 1 |
| Old age and ugliness | 1 | Bilious attack | 1 |
| Orphanage | 39 | Ague | 9 |
| Half orphanage | 3 | Heart disease | 2 |
| Children | 107 | Brain disease | 1 |
| Loss of mother | 2 | Spinal disease | 3 |

TABLE IV—CONTINUED.

| | | | |
|---|---|---|---|
| Kidney disease | 1 | Bad eyes | 1 |
| Hip disease | 3 | Weak eyes | 1 |
| Liver complaint | 2 | Diseased arm | 1 |
| Jaundice | 1 | Diseased foot | 1 |
| Chronic dysentery | 1 | Female weakness | 1 |
| Dysentery | 2 | Piles | 1 |
| Cholera morbus | 1 | Gravel | 1 |
| Dyspepsia | 1 | Hernia | 3 |
| Dropsy | 8 | Accident | 5 |
| Consumption | 28 | Injury by falling | 1 |
| Weak lungs | 1 | Injury in a mine | 2 |
| Pneumonia | 3 | Injury to head | 1 |
| Lung disease | 1 | Injury to back | 2 |
| Asthma | 5 | Injury on railroad | 3 |
| Bronchitis | 1 | Injury to hip | 3 |
| Sore throat | 1 | Injury to leg | 3 |
| Nerve disease | 4 | Shot in leg | 1 |
| St. Vitus's dance | 2 | Broken ribs | 2 |
| Insanity | 243 | Broken hip | 3 |
| Insanity and paralysis | 1 | Broken limbs | 1 |
| Insanity and idiocy | 2 | Broken leg | 12 |
| Insanity and blindness | 2 | Broken ankle | 1 |
| Monomania | 1 | Broken arm | 3 |
| Religious excitement | 1 | Amputation of foot | 1 |
| Apoplexy | 1 | Loss of both feet | 2 |
| Paralysis | 38 | Loss of arm and leg | 1 |
| Eremia | 1 | Lost use of limbs | 1 |
| Fits | 46 | Loss of leg | 5 |
| Fits and insanity | 6 | Loss of arm | 2 |
| Fits and rheumatism | 1 | Loss of hand in mill | 1 |
| Fits and being crippled | 1 | Foot cut | 1 |
| Epilepsy | 25 | Wounded foot | 3 |
| Epilepsy and idiocy | 6 | Frozen feet | 6 |
| Rheumatism | 36 | Frozen foot | 2 |
| Measles | 2 | Frozen hands | 1 |
| Small-pox | 10 | Frozen hand | 1 |
| Erysipelas | 3 | Frozen | 1 |
| Scrofula | 3 | Burned | 3 |
| Cancer | 6 | Scalded | 1 |
| Cancer and loss of leg | 1 | Shot himself | 1 |
| Abscess | 1 | Being crippled | 79 |
| Ulcer | 1 | Disabled | 3 |
| Fever-sore | 4 | Lameness | 11 |
| Sore leg | 8 | Lame back | 1 |
| Bad leg | 1 | Old age and helplessness of wife | 1 |
| Sore feet | 1 | Indentured | 2 |
| Bad feet | 1 | Loss of property | 2 |
| Sore hand | 3 | Misfortune | 1 |
| Sore eyes | 13 | "Mighty odd" | 1 |

## TABLE V.

*The assigned causes of indigency of families, and of persons not members of any family, relieved outside the poorhouses.*

| | | | |
|---|---|---|---|
| Intemperance | 148 | Desertion by parents | 8 |
| Intemperance, third generation of paupers | 2 | Desertion by father | 1 |
| Intemperance, second generation of paupers | 5 | Desertion | 36 |
| Intemperance and abandonment | 1 | Desertion by husband | 179 |
| Intemperance and laziness | 2 | Desertion by wife | 1 |
| Intemperance and death of children | 1 | Sickness of husband | 19 |
| Intemperance and blindness | 1 | Insanity of husband | 14 |
| Intemperance and old age | 4 | Blindness of husband | 1 |
| Intemperance and sickness | 5 | Imprisonment of husband | 40 |
| Intemperance and consumption | 1 | Husband losing an arm | 2 |
| Intemperance and being crippled | 1 | Husband cutting his foot | 1 |
| Intemperance and broken leg | 1 | Emigrant,—husband died | 2 |
| Intemperance of husband and desertion | 14 | Widowhood | 506 |
| Intemperance of father | 1 | Widowhood and blind children | 2 |
| Opium habit | 3 | Widowhood and idiotic child | 1 |
| Dissipation | 1 | Widowhood and crippled child | 1 |
| Prostitution | 4 | Widowhood—sickness | 46 |
| Bastardy | 7 | Widowhood and being out of work | 2 |
| Illegitimate children | 7 | Widowhood and blindness of sisters | 1 |
| Venereal disease | 7 | Awaiting husband | 1 |
| Depravity | 1 | "A mother" | 1 |
| Vagrancy | 16 | Care of baby | 1 |
| Vagrancy and sickness | 3 | Confinement | 10 |
| Tramps | 254 | Confinement—husband imprisoned | 2 |
| Slovenliness | 1 | Pregnancy | 5 |
| Laziness | 75 | Idiocy | 39 |
| Laziness and sickness | 11 | Imbecility | 7 |
| Shiftlessness of husband | 5 | Incompetency | 32 |
| Arrest for arson | 1 | Blindness | 74 |
| Disorderly husband | 1 | Blindness from blasting | 3 |
| Imprisonment | 4 | Blindness and sickness | 1 |
| "Escaped convict" | 1 | Blindness and idiocy | 2 |
| Old age | 664 | Blindness and being crippled | 1 |
| Old age and blindness | 11 | Being deaf and dumb | 2 |
| Old age and sickness | 57 | Deafness | 2 |
| Old age and cancer | 2 | Sickness | 1845 |
| Old age and hernia | 1 | Sickness and death | 120 |
| Old age and rheumatism | 3 | Sickness of wife | 9 |
| Old age and being crippled | 10 | Sickness of children | 10 |
| Old age and large family | 2 | Sickness and imbecility | 2 |
| Old age and blind wife | 1 | Sickness and being crippled | 3 |
| Orphanage | 28 | Sickness and fine | 1 |
| Children | 8 | Sickness and being a spendthrift | 14 |
| Blind children | 2 | Debility | 15 |
| Helplessness | 1 | Nervous debility | 1 |
| Death of father | 1 | Puerperal convulsions | 1 |
| Father being killed and mother insane | 1 | Miscarriage | 1 |
| Insanity of mother | 1 | Abortion and fever | 1 |
| Sickness of mother | 1 | Female difficulty | 2 |
| Pauperism of mother | 2 | Fever | 24 |
| Imprisonment of father | 1 | Brain fever | 1 |
| | | Rheumatic fever | 2 |
| | | Scarlet fever | 5 |
| | | Typhoid fever | 29 |
| | | Bilious fever | 8 |

TABLE V.—CONTINUED.

| | | | |
|---|---|---|---|
| Malarial fever | 6 | Injury to arm | 3 |
| Ague | 7 | Injury to knee | 2 |
| Diseased liver | 1 | Injury to foot | 6 |
| Small-pox | 2 | Being injured in mine | 7 |
| Measles | 3 | Being injured by falling tree | 3 |
| Mumps | 1 | Being injured in mill | 8 |
| Diphtheria | 31 | Being injured in woods | 4 |
| Diphtheria and crippled hand | 1 | Injury to hand | 2 |
| Heart disease | 3 | Loss of leg in mine | 1 |
| Consumption | 65 | Loss of limb and sickness | 1 |
| Pneumonia | 7 | Amputation of leg | 14 |
| Congestion of lungs | 2 | Amputation of arm | 5 |
| Asthma | 5 | Amputation of hand | 4 |
| Bronchitis | 1 | Frozen feet—amputation | 1 |
| Congestion | 2 | Loss of feet | 1 |
| Hemorrhage | 1 | Broken leg and broken arm | 1 |
| Chronic catarrh | 1 | Broken legs | 2 |
| Dropsy | 11 | Broken leg | 44 |
| Inflammation | 1 | Broken leg and sickness | 1 |
| Inflammation of bowels | 1 | Broken arm | 13 |
| Consumption of bowels | 1 | Broken shoulder | 3 |
| Chronic diarrhea | 1 | Dislocated shoulder | 3 |
| Epilepsy | 6 | Broken ribs | 1 |
| Fits | 12 | A fall | 2 |
| Fits and insanity | 2 | Being kicked by a horse | 1 |
| Epilepsy and tumor | 1 | Being thrown from a wagon | 3 |
| St. Vitus's dance | 2 | Freezing of feet | 11 |
| Spinal disease | 4 | Freezing of hands | 1 |
| Sun-stroke | 3 | Being scalded | 1 |
| Softening of the brain | 2 | Being burned | 2 |
| Insanity | 46 | Death (by burning) | 1 |
| Insanity of wife | 1 | Death (by drowning) | 1 |
| Insanity and idiocy | 1 | Death (killed) | 4 |
| Paralysis | 19 | Death (by suicide) | 2 |
| Rheumatism | 54 | Being shot | 3 |
| Chronic rheumatism | 3 | Being wounded | 5 |
| Neuralgia | 1 | Being poisoned | 1 |
| Hip disease | 2 | Being crippled | 70 |
| Hernia | 9 | Crippled from blasting | 2 |
| Gravel | 1 | Being crippled and simple | 1 |
| Leprosy | 1 | Crippled arm | 1 |
| Tumor | 2 | Crippled hand | 4 |
| Ovarian tumor | 1 | Lameness | 12 |
| Cancer | 10 | Lame back | 1 |
| Cancer of stomach | 2 | Large family and injury to foot | 1 |
| Abscess | 1 | Death of child | 14 |
| Fever-sore | 7 | Misfortune | 4 |
| Sore eyes | 5 | Loss by fire | 25 |
| Sore hand | 2 | Out of employment | 86 |
| Sore leg | 3 | Bad management | 4 |
| Sore feet | 1 | Robbed by lawyers | 1 |
| Sore foot | 1 | Indians | 8 |
| Surgical operations | 1 | Emigrants | 6 |
| Effect of medicines | 1 | Natural born paupers | 5 |
| Accident | 17 | "Transportation" | 36 |
| Accident on railroad | 3 | "Holding town office forty years" | 1 |
| Accidental explosion of vitriol | 1 | Helping others | 1 |
| Explosion | 1 | "Total wreck" | 1 |
| Being disabled | 5 | Absent minded | 2 |
| Injury | 10 | Being unable to work | 4 |
| Injury to spine | 1 | | |

## TABLE VI.

*Showing, for the State and Counties, the Whole Amount expended in the Care and Support of the Poor, the Amounts paid from the Poor Funds, and the Amounts paid from all Other Funds, for the year ending September 30, 1881.*

| STATE AND COUNTIES. | Whole Amount Expended. | Paid from Poor Funds. | Paid from other than Poor Funds. |
|---|---|---|---|
| STATE | *a* $637,273 73 | $443,559 17 | $166,850 92 |
| Alcona | $4,289 16 | $4,014 16 | $275 00 |
| Allegan | 11,235 08 | 9,203 12 | 2,031 96 |
| Alpena | 6,175 31 | 5,165 97 | 1,009 34 |
| Antrim | 3,747 51 | 2,517 46 | 1,230 05 |
| Baraga | 818 43 | 668 43 | 150 00 |
| Barry | 5,568 45 | 3,388 96 | 2,179 49 |
| Bay | 8,091 78 | 5,035 93 | 3,055 85 |
| Benzie | 915 06 | 815 93 | 99 13 |
| Berrien | 8,267 36 | 5,535 07 | 2,732 29 |
| Branch | 7,645 32 | 5,180 88 | 2,464 44 |
| Calhoun | 18,505 66 | 16,023 29 | 2,482 37 |
| Cass | 7,986 88 | 7,101 72 | 885 16 |
| Charlevoix | 963 75 | 387 97 | 575 78 |
| Cheboygan | 2,539 61 | 2,462 11 | 77 50 |
| Chippewa | 2,985 52 | 2,785 52 | 200 00 |
| Clare | 1,390 16 | 1,256 26 | 133 90 |
| Clinton | 5,369 27 | 4,157 50 | 1,211 77 |
| Crawford | 609 41 | 384 41 | 225 00 |
| Delta | 3,545 27 | ..... | 3,545 27 |
| Eaton | 6,998 72 | 3,930 34 | 3,068 38 |
| Emmet | 1,145 86 | 1,015 86 | 130 00 |
| Genesee | 17,612 75 | 13,368 46 | 4,244 29 |
| Gladwin | 988 67 | 891 92 | *b* 96 75 |
| Grand Traverse | 875 15 | 875 15 | ..... |
| Gratiot | 5,170 33 | 4,251 13 | 919 20 |
| Hillsdale | 5,984 27 | 4,506 29 | 1,477 98 |
| Houghton | 13,955 97 | 13,955 97 | ..... |
| Huron | 4,038 08 | 3,724 08 | 314 00 |
| Ingham | 12,916 38 | 10,397 08 | 2,519 30 |
| Ionia | 8,424 31 | 6,178 89 | 2,245 42 |
| Iosco | 5,444 87 | 2,955 91 | *c* 2,488 96 |
| Isabella | *d* 4,181 61 | 4,181 61 | ..... |
| Jackson | 13,264 11 | ..... | 13,264 11 |
| Kalamazoo | 11,153 40 | 10,319 40 | 834 00 |
| Kalkaska | 1,761 24 | 1,274 24 | 487 00 |
| Kent | 36,816 78 | 26,783 79 | 10,032 99 |
| Keweenaw | 4,829 33 | 4,079 33 | *b* 750 00 |
| Lake | 2,206 61 | 1,923 79 | 282 82 |
| Lapeer | 10,585 25 | 8,478 50 | 2,106 75 |
| Leelanaw | 1,784 40 | 1,634 40 | 150 00 |
| Lenawee | 17,452 04 | 13,628 26 | 3,823 78 |
| Livingston | 5,555 66 | 5,137 82 | 417 84 |
| Mackinac | 1,929 84 | 1,824 84 | 105 00 |
| Macomb | 10,900 78 | 9,553 14 | 1,347 64 |
| Manistee | 7,569 02 | 4,769 02 | 2,800 00 |
| Marquette | 23,942 44 | 22,002 53 | 1,939 91 |
| Mason | *e* 3,721 84 | 3,721 84 | ..... |

*a* Exceeds the sum of the second and third columns by $26,863.64. See notes *a*, *b*, *c*, *d*, and *f*, following page.
*b* Probably paid from other than poor fund.
*c* Includes "cash, products of farm used, $356.28."
*d* Support of two insane persons not reported.
*e* Larger than sum of expenditures as itemized by $215.75, which "must be charged to miscellaneous expenditures." Books all burned.

TABLE VI—CONTINUED.

| COUNTIES. | Whole Amount Expended. | Paid from Poor Funds. | Paid from other than Poor Funds. |
|---|---|---|---|
| Mecosta | $6,440 05 | $4,248 60 | $2,191 45 |
| Menominee | 7,512 37 | 6,377 58 | 1,134 79 |
| Midland | 2,923 21 | 2,094 68 | 828 53 |
| Missaukee | 572 93 | 572 93 | ..... |
| Monroe | 10,756 37 | 10,358 37 | 398 00 |
| Montcalm | 15,444 35 | 12,926 03 | 2,518 32 |
| Muskegon | *a* 13,101 76 | ..... | ..... |
| Newaygo | *b* 5,312 48 | 4,331 91 | ..... |
| Oakland | 10,277 62 | 8,145 09 | 2,132 53 |
| Oceana | *c* 3,651 40 | 3,204 63 | ..... |
| Ogemaw | 629 41 | 607 41 | 22 00 |
| Ontonagon | *d* 3,142 92 | 241 10 | 2,726 82 |
| Osceola | 3,890 63 | 3,342 76 | 547 87 |
| Otsego | 634 44 | 559 44 | 75 00 |
| Ottawa | *a* 11,645 83 | ..... | ..... |
| Roscommon | 162 75 | 162 75 | ..... |
| Saginaw | 27,594 41 | 13,071 75 | 14,522 66 |
| Sanilac | *e* 6,327 69 | 5,485 28 | 842 41 |
| Schoolcraft | *f* 513 71 | ..... | ..... |
| Shiawassee | 6,034 04 | 5,872 56 | 161 48 |
| St. Clair | 16,533 29 | 13,923 09 | 2,610 20 |
| St. Joseph | 11,116 76 | 8,938 94 | 2,177 82 |
| Tuscola | 8,611 72 | 6,722 76 | 1,888 96 |
| Van Buren | 11,130 20 | 8,139 07 | 2,991 13 |
| Washtenaw | 14,108 24 | 8,822 01 | 5,286 23 |
| Wayne | 94,610 67 | 51,461 24 | 43,149 43 |
| Wexford | 2,735 78 | 2,500 91 | 234 87 |

*a* Report does not show from what funds paid.
*b* Includes $960.57 for which report does not state from what fund paid.
*c* Includes $446.77 for which report does not show from what fund paid.
*d* Includes $175 for which report does not show from what fund paid.
*e* Expense of two persons at Harper's Hospital not included.
*f* Obtained by footing itemized expenditures.

For thirteen counties the total cost of maintaining the poor, as summed up by the Superintendents and shown in the first column of the foregoing table, is different from the total as found by footing the itemized expenditures, that is, the amounts shown in the first column of Table VII., the first and last columns of Table IX., and the first column of Table X. The differences are shown in the last column of the following exhibit, the plus sign indicating that the total as reported by the Superintendents is greater, and the minus sign less, than the total obtained by footing:

| COUNTIES. | As Summed up by the Superintendents. | As found by Footing Items. | Differences. |
|---|---|---|---|
| Berrien | $8,267 36 | $8,267 44 | — $00 08 |
| Emmet | 1,145 86 | 1,095 86 | + 50 00 |
| Grand Traverse | 875 15 | 975 15 | — 100 00 |
| Gratiot | 5,170 33 | 5,170 43 | — 10 |
| Houghton | 13,955 97 | 13,956 97 | — 1 00 |
| Isabella | 4,181 61 | 4,164 11 | + 17 50 |
| Kalamazoo | 11,153 40 | 11,153 39 | + 01 |
| Kent | 36,816 78 | 36,816 93 | — 15 |
| Manistee | 7,569 02 | 7,746 02 | — 177 00 |
| Mason | 3,721 84 | 3,506 09 | + 215 75 |
| Osceola | 3,890 63 | 3,890 70 | — 07 |
| Shiawassee | 6,034 04 | 6,034 05 | — 01 |
| Wexford | 2,735 78 | 2,735 57 | + 21 |

## TABLE VII.

*Showing, for the State and Counties, the Poorhouse and*

| NUMBER. | STATE AND COUNTIES. | Totals of Poorhouse and Poor-farm Expenses. | POOR-HOUSE EXPENSES. Paid to Keepers. | Clothing Purchased. | Food Purchased. | Medical Attendance and Medicines. | Funeral Expenses. | Transportation of Paupers to and from the Poorhouses. | Furniture Purchased. |
|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| | STATE | a$194,266 21 | $33,205 36 | $17,323 46 | $52,409 37 | $10,418 62 | $1,285 41 | $3,047 18 | $4,724 16 |
| 1 | Alcona | $2,083 68 | $572 22 | $50 00 | $375 31 | $40 00 | $10 00 | $4 00 | $20 00 |
| 2 | Allegan | 5,023 23 | 550 00 | 815 31 | 941 32 | 300 61 | 50 50 | 104 05 | 270 05 |
| 3 | Alpena | 1,836 56 | 400 00 | 87 10 | 1,037 98 | b | 50 00 | ---------- | 20 00 |
| 4 | Barry | 1,143 12 | 343 50 | 192 69 | 83 04 | 51 61 | ---------- | 11 50 | ---------- |
| 5 | Bay | 2,601 62 | 500 00 | 260 02 | 711 91 | 8 35 | 5 00 | 36 50 | 139 66 |
| 6 | Berrien | c 4,678 58 | 406 25 | 596 84 | 1,048 63 | 203 93 | 10 00 | 15 00 | 110 20 |
| 7 | Branch | 3,568 67 | 825 00 | 495 19 | 727 37 | 96 02 | 33 00 | 8 35 | 87 38 |
| 8 | Calhoun | 8,025 03 | 350 00 | 640 00 | 3,587 41 | 350 00 | 36 00 | 2 80 | ---------- |
| 9 | Cass | 3,144 81 | 900 00 | 336 61 | 270 76 | 135 60 | 11 00 | 25 75 | 62 62 |
| 10 | Clare | 804 78 | 345 33 | 32 10 | 123 10 | 54 54 | ---------- | 4 90 | ---------- |
| 11 | Clinton | 1,970 68 | 550 00 | 399 16 | 375 77 | 100 00 | 10 00 | 25 25 | 25 50 |
| 12 | Eaton | 2,478 24 | 900 00 | 355 32 | 522 38 | 59 00 | 33 65 | 69 23 | 63 35 |
| 13 | Genesee | 3,636 16 | 700 00 | 588 33 | 496 98 | 237 35 | 54 50 | 50 00 | 260 00 |
| 14 | Gratiot | • 1,870 04 | e 1,595 39 | 10 93 | ---------- | 150 45 | 8 50 | 7 00 | 14 96 |
| 15 | Hillsdale | 2,682 65 | 1,000 00 | 345 02 | 290 80 | 95 00 | 55 00 | 45 30 | 61 83 |
| 16 | Houghton | 3,284 50 | 720 00 | 76 00 | 1,509 65 | 120 00 | 15 00 | 18 00 | 50 00 |
| 17 | Huron | 2,515 43 | 600 00 | 91 20 | 559 22 | 42 93 | ---------- | ---------- | 37 33 |
| 18 | Ingham | 5,166 13 | 600 00 | 430 63 | 1,834 83 | 210 40 | 89 50 | 67 50 | 71 59 |
| 19 | Ionia | 2,849 97 | 704 17 | 191 50 | 496 41 | 149 20 | 6 00 | 44 25 | 15 00 |
| 20 | Iosco | 3,327 13 | 586 41 | 50 34 | 349 74 | 118 98 | 5 00 | 4 50 | 22 10 |
| 21 | Isabella | 2,067 72 | 475 50 | 140 87 | 245 92 | 7 00 | 6 00 | 7 50 | 28 92 |
| 22 | Jackson | 2,194 27 | 675 00 | 124 73 | 488 23 | 132 89 | 22 00 | 15 00 | 28 00 |
| 23 | Kalamazoo | 4,083 17 | 1,000 00 | 256 66 | 471 14 | 331 57 | ---------- | 74 15 | ---------- |
| 24 | Kalkaska | 909 71 | e | 100 00 | f 425 50 | 281 76 | ---------- | 14 00 | 13 43 |
| 25 | Kent | 5,033 92 | 800 00 | 328 85 | 2,385 37 | 581 00 | 25 00 | 18 00 | 42 30 |
| 26 | Keweenaw | 1,061 06 | e 785 20 | 41 75 | ---------- | 120 00 | 10 13 | 16 00 | ---------- |
| 27 | Lapeer | 3,063 30 | 675 00 | 313 33 | 284 58 | 269 27 | 36 25 | 16 40 | 25 05 |
| 28 | Lenawee | 4,181 78 | 1,005 54 | 365 00 | 953 06 | 89 45 | 35 40 | 10 50 | 39 25 |
| 29 | Livingston | 2,924 67 | 500 00 | 27 45 | 314 00 | 28 00 | 26 00 | 28 25 | 62 25 |
| 30 | Macomb | 3,537 22 | 800 00 | 400 79 | 1,210 16 | 330 00 | 16 00 | 23 05 | 62 86 |
| 31 | Manistee | 2,740 88 | 593 75 | 159 99 | 561 93 | 16 70 | ---------- | ---------- | 224 85 |
| 32 | Marquette | 6,135 36 | 450 00 | 368 09 | 2,229 34 | 1,342 25 | 70 50 | 88 94 | 269 73 |
| 33 | Mason | 1,232 52 | 480 00 | 31 08 | 77 33 | 5 05 | 10 00 | ---------- | 14 59 |
| 34 | Mecosta | 2,094 88 | 400 00 | 92 08 | 305 50 | 19 60 | 24 00 | 28 00 | 6 50 |
| 35 | Menominee | 853 47 | e | ---------- | f 693 87 | ---------- | 22 00 | 59 25 | 34 35 |
| 36 | Midland | 1,194 54 | 376 68 | 83 27 | 145 18 | 90 00 | 13 50 | 10 00 | 29 24 |
| 37 | Monroe | 5,313 96 | 600 00 | 735 79 | 577 36 | 343 15 | 58 00 | 74 40 | 83 45 |
| 38 | Montcalm | 3,636 94 | 650 00 | 229 14 | 236 48 | 124 90 | 27 75 | 30 39 | 55 02 |
| 39 | Muskegon | 2,906 98 | 400 00 | 79 94 | 355 46 | 173 90 | 38 00 | 3 50 | 76 98 |
| 40 | Newaygo | 1,737 87 | 312 00 | 30 00 | ---------- | 100 00 | 75 00 | 15 00 | 20 00 |
| 41 | Oakland | 3,274 86 | h 940 00 | 203 40 | 500 91 | 165 21 | ---------- | 105 80 | 60 35 |
| 42 | Oceana | 2,173 48 | 375 00 | 96 75 | 247 58 | 21 65 | 10 33 | ---------- | 98 21 |
| 43 | Ontonagon | i 241 10 | ---------- | 4 10 | 192 00 | 14 00 | ---------- | ---------- | ---------- |
| 44 | Osceola | 1,502 90 | 550 00 | 28 73 | 105 75 | 56 35 | ---------- | 5 25 | 9 95 |
| 45 | Ottawa | 2,507 69 | j 660 00 | 163 00 | ---------- | 129 00 | ---------- | 17 50 | 33 00 |
| 46 | Saginaw | 6,113 55 | 620 94 | 443 63 | 1,652 64 | 426 40 | 28 00 | 110 60 | 236 10 |
| 47 | Sanilac | 1,412 18 | 400 00 | 144 16 | 286 17 | 105 22 | 24 50 | 12 00 | ---------- |
| 48 | Shiawassee | 1,956 04 | 1,000 00 | 236 40 | 218 26 | 278 19 | 21 00 | 38 35 | 4 00 |
| 49 | St. Clair | 3,371 62 | 500 00 | 300 25 | 1,147 94 | 208 77 | 8 90 | 27 50 | 35 89 |
| 50 | St. Joseph | 3,495 63 | 725 00 | 300 76 | 451 79 | 118 02 | 35 00 | 29 50 | 104 10 |
| 51 | Tuscola | 2,485 41 | 690 86 | 144 25 | 58 64 | 115 00 | 12 00 | 305 43 | 33 00 |
| 52 | Van Buren | 3,290 34 | 600 00 | 206 95 | 412 59 | 192 51 | ---------- | 47 55 | 339 45 |
| 53 | Washtenaw | 6,827 23 | 500 00 | 486 68 | 1,727 87 | 376 08 | 77 50 | 29 40 | ---------- |
| 54 | Wayne | 36,018 92 | 1,516 62 | 4,611 30 | 18,109 21 | 1,301 76 | ---------- | 1,244 09 | 1,096 87 |

*a* Less than the sum of the totals in the following columns by $2,700. See note *c*.
*b* Physician hired by the year and his salary is probably included in temporary relief.
*c* As reported by superintendents, but $2,700 less than footing of items. Possibly the cost of building erected was $300 instead of $3,000.
*d* See note *c*.
*e* See Schedule A.

## TABLE VII.

*Poor-farm Expenses during the year ending September 30, 1881.*

| | | POOR-FARM EXPENSES. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Labor Hired. | Miscellaneous. | Farms Purchased. | Buildings Erected. | Buildings Repaired. | Improvement of Farms. | Stock Purchased. | Farm Implem'ts Purchased. | Hay, Grain, and Seed Purchased. | Labor Hired. | Miscellaneous. | NUMBER. |
| 9. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | |
| $9,009 82 | $10,597 94 | $1,348 28 | $9,367 85 | $9,170 77 | $5,630 53 | $5,458 25 | $3,135 33 | $5,313 55 | $10,424 53 | $5,095 80 | |
| | | | | $337 00 | | $130 00 | | | $545 15 | | 1 |
| $522 28 | $14 28 | | $497 31 | 76 27 | | 13 00 | $215 62 | $154 21 | 498 39 | | 2 |
| 137 25 | 39 00 | | | 48 98 | | | | | 16 25 | | 3 |
| 96 75 | 87 62 | | | 43 44 | | | 27 00 | 13 50 | 156 84 | $35 63 | 4 |
| 97 15 | 4 14 | | | | | 245 00 | 176 19 | 219 77 | 131 73 | 16 20 | 5 |
| 351 87 | 72 25 | | d3,000 00 | 17 07 | $64 51 | 405 00 | 66 81 | 310 83 | 207 17 | 492 22 | 6 |
| | 122 13 | | | 879 42 | | 10 00 | 39 50 | 62 88 | | 182 48 | 7 |
| 211 72 | 691 69 | | | 185 52 | 549 99 | 250 00 | | 597 98 | 571 92 | | 8 |
| 398 75 | 165 62 | | 153 30 | 359 47 | | 30 00 | 2 50 | 74 44 | 123 22 | 95 17 | 9 |
| | 41 42 | | | | | | 11 00 | 91 11 | 44 25 | 57 03 | 10 |
| 218 50 | 91 50 | | | | 34 50 | | 9 00 | 19 50 | 112 00 | | 11 |
| | | | | 80 00 | 35 13 | 60 00 | 225 55 | 12 50 | 62 13 | | 12 |
| 260 00 | | | 100 00 | 200 00 | 150 00 | | 75 00 | 50 00 | 220 00 | 100 00 | 13 |
| | 22 36 | | | 21 95 | | | | | 38 50 | | 14 |
| | 6 00 | | 450 00 | 26 00 | 229 38 | | 34 43 | 15 00 | 28 90 | | 15 |
| 42 00 | 99 35 | | | 91 35 | 33 15 | 480 00 | | 30 00 | | | 16 |
| 128 87 | 74 43 | | | 90 74 | 447 35 | 23 00 | 54 71 | 257 75 | 107 91 | | 17 |
| | 547 31 | | | | 590 50 | 110 00 | 69 16 | 208 31 | 336 40 | | 18 |
| | 334 46 | | 287 68 | 8 25 | 8 61 | 140 00 | 5 85 | 39 50 | 224 73 | 194 36 | 19 |
| 106 25 | 22 22 | | 1,275 00 | 2 65 | | 172 50 | 97 65 | 63 88 | 349 91 | 100 00 | 20 |
| 121 25 | 48 17 | | 64 54 | 31 73 | 425 09 | 6 00 | 73 45 | 74 85 | 220 53 | 90 40 | 21 |
| | | | | 99 22 | 43 64 | 177 00 | 31 19 | 29 23 | 207 25 | 120 89 | 22 |
| 539 88 | 218 69 | | 238 39 | 18 10 | 10 08 | 8 75 | 83 89 | | 398 21 | 433 66 | 23 |
| | | | | 23 40 | 51 57 | | | | | | 24 |
| 130 00 | 103 78 | | | 131 40 | | | 39 50 | 1 20 | 266 39 | 181 13 | 25 |
| | g 84 00 | | | 4 00 | | | | | | | 26 |
| 187 30 | 72 29 | | 485 05 | 99 68 | | 13 50 | | 342 28 | 172 74 | 70 60 | 27 |
| | 748 50 | | | 481 39 | 50 00 | 205 00 | 25 00 | | 122 18 | 51 50 | 28 |
| | 6 00 | | | 896 10 | 61 14 | 402 65 | | 50 28 | 234 57 | 259 98 | 29 |
| | | | | 23 25 | | 91 00 | 13 50 | 334 73 | | 231 88 | 30 |
| 247 20 | | | | 125 00 | 362 85 | | | 101 38 | 277 23 | | 31 |
| 293 80 | 504 74 | | | 196 27 | 74 84 | 70 00 | 130 55 | 89 56 | | 16 75 | 32 |
| | | | | 73 49 | 214 12 | 35 00 | 157 55 | 10 50 | 123 90 | | 33 |
| 60 00 | 34 00 | | 550 00 | | 129 81 | 12 00 | | 152 39 | 281 00 | | 34 |
| | | | | | | | | | | 44 00 | 35 |
| | 4 51 | | | 25 12 | | | 25 00 | 156 70 | 140 20 | 104 14 | 36 |
| 135 00 | 164 82 | | | 929 92 | 485 68 | | 137 50 | 291 90 | 696 99 | | 37 |
| | 990 60 | $557 20 | | | | 585 50 | | | 149 96 | | 38 |
| 37 46 | 58 84 | 180 00 | 1,000 00 | | | 10 00 | 144 50 | 233 85 | 73 55 | 41 08 | 39 |
| 75 00 | 508 00 | | | | | 10 00 | | 75 00 | 150 00 | 367 87 | 40 |
| | 466 59 | | 122 90 | 110 62 | 223 22 | 220 00 | 10 00 | 115 76 | 30 10 | | 41 |
| 128 12 | 70 11 | | | | 249 92 | 165 00 | 495 71 | 34 63 | 168 31 | 12 16 | 42 |
| | | | | 17 50 | | | | | 13 50 | | 43 |
| | | | 28 57 | | 110 00 | 206 50 | 54 38 | 181 81 | 65 22 | 150 39 | 44 |
| | 715 00 | | 175 00 | 68 00 | | | 130 00 | 83 00 | 223 72 | 85 47 | 45 |
| | 194 35 | 611 08 | 845 77 | 395 52 | | 220 18 | | 46 45 | 99 00 | 112 20 | 46 |
| 104 00 | 138 91 | | | 29 65 | 20 50 | 9 50 | 30 00 | 31 22 | 16 90 | 59 45 | 47 |
| | | | | | | 11 00 | | 15 00 | 11 29 | 122 55 | 48 |
| 221 98 | 116 51 | | | 77 90 | 12 00 | 152 25 | 43 00 | 246 92 | 192 00 | 79 81 | 49 |
| 188 17 | | | | 49 91 | 557 95 | 131 00 | 77 51 | 53 43 | 450 32 | 223 17 | 50 |
| 114 00 | 568 24 | | | | 44 73 | 50 00 | 57 00 | | 173 86 | 119 40 | 51 |
| 337 00 | 359 56 | | 94 34 | 23 86 | 77 28 | | 26 00 | | 423 80 | 98 45 | 52 |
| 599 66 | 1,440 50 | | | 94 98 | 232 99 | 232 92 | 160 51 | 69 68 | 375 83 | 378 63 | 53 |
| 2,918 61 | 545 45 | | | 2,676 65 | | 365 00 | 79 62 | 320 66 | 890 58 | 342 50 | 54 |

f Paid for board of paupers.
g Rent of building used as poorhouse.
h Includes ordinary labor in the house and on the farm.
i Farm was rented on the first of May, since which time paupers have been taken care of outside the poorhouse.
j Includes all help inside the poorhouse except special nurse.

## TABLE VIII.

*Showing, for the State and Counties, the average cost of each pauper in the poorhouses within the year, and the average cost per week of each pauper maintained in the poorhouses during the year ending September 30, 1881.*

| STATE AND COUNTIES. | Average Cost of each Pauper in the Poorhouses within the year.* | Average Cost per week of each Pauper maintained in the Poorhouses during the year.† | Average Cost per week of each Pauper maintained in the Poorhouses during the year after deducting value of farms purchased and buildings erected.‡ |
|---|---|---|---|
| STATE | $33 04 | $1 94 | $1 83 |
| Alcona | $347 28 | $16 03 | ..... |
| Allegan | 57 74 | 1 82 | $1 64 |
| Alpena | 55 65 | 5 00 | ..... |
| Barry | 35 72 | 1 49 | ..... |
| Bay | 20 49 | 3 28 | ..... |
| Berrien | 50 85 | 1 96 | 70 |
| Branch | 52 48 | 1 56 | ..... |
| Calhoun | 59 44 | 2 34 | ..... |
| Cass | 56 16 | 1 70 | 1 62 |
| Clare | 61 91 | 9 44 | ..... |
| Clinton | 61 58 | 2 05 | ..... |
| Eaton | 38 13 | 1 49 | ..... |
| Genesee | 50 50 | 1 76 | 1 71 |
| Gratiot | 50 54 | 1 80 | ..... |
| Hillsdale | 33 96 | 87 | 73 |
| Houghton | 86 43 | 2 87 | ..... |
| Huron | 132 39 | 10 77 | ..... |
| Ingham | 59 38 | 2 23 | ..... |
| Ionia | 42 54 | 1 30 | 1 17 |
| Iosco | 107 33 | 6 00 | 3 70 |
| Isabella | 129 23 | 7 15 | 6 93 |
| Jackson | 42 20 | 1 80 | ..... |
| Kalamazoo | 72 91 | 2 38 | 2 24 |
| Kalkaska | 151 62 | 5 38 | ..... |
| Kent | 63 72 | 2 51 | ..... |
| Keweenaw | 176 85 | 3 40 | ..... |
| Lapeer | 53 74 | 1 96 | 1 65 |
| Lenawee | 32 17 | 1 28 | ..... |
| Livingston | 104 45 | 4 75 | ..... |
| Macomb | 32 45 | 1 81 | ..... |
| Manistee | 66 85 | 3 51 | ..... |
| Marquette | 57 88 | 3 16 | ..... |
| Mason | 94 81 | 2 96 | ..... |
| Mecosta | 48 72 | 2 80 | 2 07 |
| Menominee | 28 45 | 3 70 | ..... |
| Midland | 56 88 | 2 55 | ..... |

* Computed from the second column in Table I., and the first column in Table VII.
† Computed from the first column in Tables I. and VII.
‡ Except for "State," only those counties represented that have purchased farms or erected buildings.

TABLE VIII—CONTINUED.

| COUNTIES. | Average Cost of each Pauper in the Poor-houses within the year.* | Average Cost per week of each Pauper maintained in the Poorhouses during the year.† | Average Cost per week of each Pauper maintained in the Poorhouses during the year after deducting value of farms purchased and buildings erected.‡ |
|---|---|---|---|
| Monroe | $45 03 | $1 60 | ..... |
| Montcalm | 38 69 | 1 84 | $1 56 |
| Muskegon | 76 50 | 6 58 | 3 91 |
| Newaygo | 51 11 | 4 18 | ..... |
| Oakland | 33 42 | 1 48 | 1 42 |
| Oceana | 86 94 | 3 48 | ..... |
| Ontonagon | 120 55 | 2 32 | ..... |
| Osceola | 136 63 | 9 63 | 9 45 |
| Ottawa | 65 99 | 2 35 | 2 19 |
| Saginaw | 61 75 | 3 46 | 2 63 |
| Sanilac | 45 55 | 1 69 | ..... |
| Shiawassee | 51 47 | 1 45 | ..... |
| St. Clair | 48 17 | 1 61 | ..... |
| St. Joseph | 69 91 | 2 04 | ..... |
| Tuscola | 71 01 | 2 61 | ..... |
| Van Buren | 65 81 | 2 26 | 2 20 |
| Washtenaw | 16 14 | 1 69 | ..... |
| Wayne | 13 56 | 1 29 | ..... |

* Computed from the second column in Table I., and the first column in Table VII.
† Computed from the first column in Tables I. and VII.
‡ Except for "State," only those counties represented that have purchased farms or erected buildings.

## TABLE IX.

*Showing, for the State and Counties, the Expenditures for Temporary Relief and Permanent Support of Indigent Persons not in the Poor-houses, during the year ending September 30, 1881.*

| STATE AND COUNTIES. | EXPENDITURES FOR TEMPORARY RELIEF. | | | | | | | | Cost of Maintaining Permanent Paupers outside the Poor-houses. |
|---|---|---|---|---|---|---|---|---|---|
| | Totals. | Medical Attendance and Medicines. | Funeral Expenses. | Food Purchased. | Fuel Purchased. | Clothing Purchased. | Miscellaneous. | Transportation (anywhere except to and from Poorhouses and public institutions.) | |
| STATE | a$295,940 45 | $57,716 66 | $15,599 19 | $139,453 80 | $27,014 54 | $17,660 50 | $26,765 10 | $9,241 93 | $17,546 08 |
| Alcona | $1,667 38 | $550 00 | $40 00 | $850 38 | $150 00 | $50 00 | $27 00 | ..... | ..... |
| Allegan | 3,886 34 | 1,156 89 | 174 75 | 1,477 57 | 148 44 | 793 00 | 58 84 | $76 85 | ..... |
| Alpena | 3,329 41 | b 400 00 | 163 00 | c | c | c | d 2,606 31 | 160 10 | ..... |
| Antrim | 2,141 96 | 280 40 | 80 00 | 1,389 31 | 27 50 | 244 75 | ..... | 120 00 | $375 50 |
| Baraga | 668 43 | 100 00 | 18 00 | 521 39 | 27 00 | ..... | ..... | 2 04 | ..... |
| Barry | 1,745 04 | 684 25 | 49 00 | 645 82 | 9 25 | 248 66 | ..... | 108 06 | 207 00 |
| Bay | 2,434 31 | 1,001 10 | 124 00 | 1,041 08 | ..... | 11 17 | 28 22 | 228 74 | ..... |
| Benzie | 716 44 | 21 20 | 26 00 | 592 32 | 2 25 | 44 42 | 30 25 | ..... | ..... |
| Berrien | 3,114 82 | 645 88 | 204 50 | 1,125 09 | 238 01 | 260 67 | 393 27 | 247 40 | ..... |
| Branch | 2,491 63 | 594 44 | 176 28 | 864 37 | 358 31 | 338 54 | ..... | 159 69 | 156 00 |
| Calhoun | 5,557 53 | 1,295 36 | 174 40 | 2,587 00 | 708 23 | 447 00 | 82 30 | 263 24 | 1,467 23 |
| Cass | 2,923 20 | 581 20 | 122 29 | 1,372 46 | 235 75 | 431 77 | 116 00 | 63 73 | 927 71 |
| Charlevoix | 722 47 | 133 05 | 20 00 | 407 68 | 14 95 | 37 29 | 75 00 | 34 50 | 166 67 |
| Cheboygan | 2,462 11 | 150 00 | 43 00 | 2,153 11 | 8 00 | 40 00 | ..... | 68 00 | ..... |
| Chippewa | 2,785 52 | 14 55 | 41 50 | ..... | e | e | f 2,692 47 | 37 00 | ..... |
| Clare | 451 48 | 155 19 | 125 53 | 141 76 | ..... | 70 | 50 | 27 80 | ..... |
| Clinton | g 1,829 32 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 355 00 |
| Crawford | 384 41 | 165 00 | 4 00 | 138 70 | 1 00 | 16 92 | 54 59 | 4 20 | ..... |
| Delta | 3,226 27 | 1,371 35 | 160 00 | 1,017 15 | 117 00 | 235 40 | 211 00 | 114 37 | ..... |
| Eaton | 1,074 74 | 168 57 | 115 15 | 390 37 | 163 45 | 183 33 | ..... | 53 87 | 302 00 |
| Emmet | 1,015 86 | 102 60 | 13 90 | 761 65 | 43 47 | 27 40 | ..... | 66 84 | ..... |
| Genesee | 9,425 99 | 1,199 10 | 306 01 | 5,775 09 | 986 10 | 577 22 | 250 00 | 332 47 | h |
| Gladwin | 883 42 | 259 65 | 25 00 | 524 07 | ..... | 26 70 | 54 00 | ..... | ..... |
| Grand Traverse | g 659 41 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 215 74 |
| Gratiot | 2,311 69 | 642 10 | 39 00 | 1,114 50 | 55 75 | 367 93 | 48 71 | 43 70 | ..... |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hillsdale | 1,755 89 | 737 61 | 76 00 | 359 58 | 303 95 | 113 89 | ..... | 164 86 | ..... |
| Houghton | 928 20 | 120 00 | 93 00 | 245 50 | 104 00 | 75 50 | 165 00 | 125 20 | 6,785 70 |
| Huron | 1,208 65 | 221 65 | 48 00 | 731 83 | ..... | 140 92 | 51 25 | 15 00 | ..... |
| Ingham | 4,292 85 | 713 40 | 447 50 | 1,960 60 | 706 03 | 100 00 | 175 47 | 189 85 | ..... |
| Ionia | 3,182 94 | 1,002 97 | 128 00 | 1,392 42 | 130 05 | 218 79 | 180 45 | 130 26 | ..... |
| Iosco | 1,370 06 | 364 88 | 48 00 | 678 19 | 9 00 | 21 17 | 18 00 | 230 82 | ..... |
| Isabella | 1,942 64 | 625 32 | 346 19 | 755 92 | 12 96 | 149 86 | 52 39 | ..... | 78 00 |
| Jackson | 7,980 60 | 910 36 | 247 50 | 4,667 65 | 1,177 54 | 365 75 | 465 65 | 146 15 | *i* |
| Kalamazoo | 3,604 74 | 569 05 | 117 60 | *j* 1,940 92 | 512 75 | 162 37 | 23 50 | 278 55 | ..... |
| Kalkaska | 411 27 | 142 25 | ..... | 193 02 | ..... | 76 00 | ..... | ..... | 140 26 |
| Kent | 21,192 10 | 1,270 95 | 360 00 | 13,630 56 | 3,948 46 | 971 37 | 568 76 | 442 00 | *h* |
| Keweenaw | 2,503 43 | 250 00 | 16 41 | *k* | *k* | *k* | *l* 2,237 02 | ..... | ..... |
| Lake | 1,923 79 | 648 98 | 140 95 | 743 64 | 34 87 | 204 08 | 102 17 | 49 10 | ..... |
| Lapeer | 4,629 17 | 1,098 86 | 32 50 | 2,144 58 | 174 55 | 864 86 | 132 24 | 181 58 | 713 93 |
| Leelanaw | 1,634 40 | 334 85 | 30 00 | 894 55 | 25 00 | 350 00 | ..... | ..... | ..... |
| Lenawee | 8,748 23 | 1,129 51 | 452 20 | 3,942 67 | 2,402 94 | 472 54 | 270 32 | 78 05 | 130 00 |
| Livingston | 1,128 97 | 520 22 | 134 37 | 326 57 | 63 28 | 67 17 | 3 91 | 13 45 | ..... |
| Mackinac | 879 92 | 13 90 | 48 21 | 748 16 | 16 50 | 53 15 | ..... | ..... | 944 92 |
| Macomb | 5,821 47 | 2,262 73 | 287 50 | 2,222 15 | 349 30 | 618 25 | ..... | 81 54 | ..... |
| Manistee | 2,028 14 | 400 00 | ..... | 1,300 00 | 15 00 | ..... | 233 14 | 80 00 | 108 00 |
| Marquette | 15,867 17 | 2,017 53 | 332 75 | 10,729 66 | 1,232 17 | 422 29 | 689 86 | 442 91 | ..... |
| Mason | 1,626 05 | 161 60 | 285 50 | 1,128 02 | ..... | 50 93 | ..... | ..... | ..... |
| Mecosta | 2,153 72 | 350 00 | 243 19 | 1,043 29 | 90 82 | 426 42 | ..... | ..... | ..... |
| Menominee | 5,323 73 | 1,588 85 | 304 50 | 3,205 27 | ..... | ..... | ..... | 225 11 | ..... |
| Midland | 791 03 | 22 60 | 194 50 | 358 53 | 22 35 | 81 47 | 106 28 | 5 30 | ..... |
| Missaukee | 569 93 | 146 95 | ..... | 387 93 | ..... | 35 05 | ..... | ..... | ..... |
| Monroe | 4,892 24 | 1,560 71 | 311 00 | 1,901 67 | 457 47 | 479 40 | 65 45 | 116 54 | ..... |
| Montcalm | 8,930 95 | *m* 2,539 79 | 707 46 | ..... | ..... | 266 39 | 4,907 68 | 509 63 | 185 89 |
| Muskegon | 6,603 66 | 770 35 | 415 75 | 4,832 27 | 152 07 | 136 77 | 118 10 | 178 35 | ..... |
| Newaygo | 2,594 61 | 335 00 | 179 82 | 1,200 00 | 30 00 | 100 00 | 649 29 | 100 50 | 300 00 |
| Oakland | 4,283 33 | 1,185 56 | 258 50 | 963 71 | 666 58 | 228 00 | 916 63 | 64 35 | 218 75 |
| Oceana | 975 65 | 274 42 | 101 05 | 323 61 | 39 75 | 72 02 | 68 60 | 96 20 | 196 00 |
| Ogemaw | 607 41 | 306 25 | 16 00 | 224 80 | 4 50 | 15 31 | ..... | 40 55 | ..... |

*a* Exceeds the sum of the itemized expenditures for temporary relief by $2,483.73. See note *g*.
*b* Probably includes medical attendance at the poorhouse. Physician is employed by the year.
*c* See note *d*.
*d* Includes cost of food, fuel, and clothing.
*e* See note *f*.
*f* Includes cost of fuel and clothing.
*g* Expenditures not itemized.
*h* No distinction was made in reports of supervisors.
*i* Included in temporary relief.
*j* Exclusive of "flour from the farm, 208 bushels."
*k* See note *l*.
*l* Probably includes cost of food, fuel, and clothing.
*m* Includes pest-house and small-pox expenses.

TABLE IX.—CONTINUED.

| COUNTIES. | Expenditures for Temporary Relief. | | | | | | | | Cost of Maintaining Permanent Paupers outside the Poor-houses. |
|---|---|---|---|---|---|---|---|---|---|
| | Totals. | Medical Attendance and Medicines. | Funeral Expenses. | Food Purchased. | Fuel Purchased. | Clothing Purchased. | Miscellaneous. | Transportation (anywhere except to and from Poorhouses and public institutions.) | |
| Ontonagon | $2,726 82 | $258 16 | $31 50 | $1,630 17 | $576 74 | $47 25 | $183 00 | ..... | ..... |
| Osceola | 1,934 15 | 650 32 | 173 22 | 780 87 | 13 83 | 144 28 | 24 58 | $147 05 | ..... |
| Otsego | 337 62 | 19 30 | 22 00 | 181 05 | 7 50 | 3 63 | 22 22 | 81 92 | ..... |
| Ottawa | 5,852 93 | 594 00 | 135 00 | 3,883 97 | 360 14 | 280 00 | 486 97 | 112 85 | ..... |
| Roscommon | 134 75 | 57 00 | ..... | 37 25 | ..... | ..... | ..... | 40 50 | ..... |
| Saginaw | 15,785 76 | 2,041 42 | 942 30 | 9,204 43 | 1,592 42 | 591 56 | 923 33 | 490 30 | $91 00 |
| Sanilac | 4,038 60 | 564 76 | 140 40 | *a* | *a* | *a* | *b* 3,195 89 | 137 55 | ..... |
| Schoolcraft | 363 71 | 71 10 | 49 75 | 151 42 | 28 40 | 37 04 | 11 00 | 15 00 | ..... |
| Shiawassee | 2,718 29 | 1,418 29 | 138 75 | 864 63 | 34 53 | 180 64 | 8 50 | 72 95 | 217 01 |
| St. Clair | 10,313 70 | *c* 1,149 57 | *c* 221 00 | *c* 6,972 97 | *c* 273 90 | *c* 1,170 50 | 373 96 | 151 80 | *d* |
| St. Joseph | 4,564 91 | 838 67 | 198 40 | 1,805 10 | 599 02 | 622 51 | 392 51 | 108 70 | 689 00 |
| Tuscola | 3,654 14 | 1,211 75 | 293 04 | 1,600 00 | 75 00 | 400 00 | 74 35 | ..... | ..... |
| Van Buren | 3,146 96 | 1,055 11 | 278 22 | 887 91 | 124 42 | 493 08 | 251 02 | 57 20 | 1,544 42 |
| Washtenaw | 3,064 77 | 506 25 | 148 95 | 1,481 63 | 436 81 | 161 92 | 90 00 | 239 23 | ..... |
| Wayne | 44,904 08 | 9,902 41 | 3,974 42 | 19,267 25 | 6,899 48 | 1,744 19 | 1,784 90 | 1,331 43 | 666 54 |
| Wexford | 2,103 14 | 1,109 57 | 203 00 | 637 01 | 16 00 | 67 31 | 13 25 | 57 00 | 363 81 |

*a* See note *b*.
*b* Includes cost of food, fuel, and clothing.
*c* "Approximate amount."
*d* "Can't tell."

# TABLE X.

*Showing, for the State and Counties, the amounts paid to Superintendents and Directors of the Poor, and to Supervisors and Justices of the Peace, for official services in relation to the poor, and the amounts paid for transportation to and from, and support of poor persons at, public institutions, for the year ending September 30, 1881.*

| STATE AND COUNTIES. | TOTALS. | PAID FOR OFFICIAL SERVICES IN RELATION TO THE POOR. | | | | PAID FOR TRANSPORTATION TO AND FROM, AND SUPPORT AT PUBLIC INSTITUTIONS. | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | To Superintendents of the Poor. | To Supervisors. | To Justices of the Peace. | To Directors of the Poor. | Insane at Asylums. | Deaf and Dumb at Flint Institute. | Blind at Lansing Institute. | Poor Persons at Other Institutions. |
| STATE | a$129,515 23 | $27,487 06 | $4,840 29 | $28 25 | $4,192 24 | $86,426 66 | $1,676 02 | $434 89 | $4,387 67 |
| Alcona | $538 10 | $275 00 | | | | $263 10 | | | |
| Allegan | 2,325 51 | 603 75 | $122 85 | | | 1,486 36 | $108 55 | | $4 00 |
| Alpena | 1,009 34 | 540 00 | 39 00 | | | 430 34 | | | |
| Antrim | 1,230 05 | 267 52 | 73 50 | | | 889 03 | | | |
| Baraga | 150 00 | 150 00 | | | | | | | |
| Barry | 2,473 29 | 235 00 | 44 50 | | | 2,135 06 | 58 73 | | |
| Bay | 3,055 85 | 450 00 | 48 97 | | | 2,539 03 | | $17 85 | |
| Benzie | 198 62 | 87 88 | 11 25 | | | 99 49 | | | |
| Berrien | 474 04 | 290 04 | 184 00 | | | | | | |
| Branch | 1,429 02 | 240 00 | 62 87 | | | 1,108 75 | 17 40 | | |
| Calhoun | 3,455 87 | 863 50 | 59 75 | | | 2,482 37 | 50 25 | | |
| Cass | 991 16 | 298 00 | 60 50 | | | 598 91 | 2 25 | | 31 50 |
| Charlevoix | 74 61 | 39 45 | 35 16 | | | | | | |
| Cheboygan | 77 50 | 77 50 | | | | | | | |
| Chippewa | 200 00 | 200 00 | | | | | | | |
| Clare | 133 90 | 133 90 | | | | | | | |
| Clinton | 1,214 27 | 146 00 | 2 50 | | | 1,065 77 | | | |
| Crawford | 225 00 | 150 00 | 9 75 | | $65 25 | | | | |
| Delta | 319 00 | 150 00 | | | | 169 00 | | | |
| Eaton | 3,143 74 | 450 00 | 75 36 | | | 2,618 38 | | | |
| Emmet | 80 00 | 80 00 | | | | | | | |
| Genesee | 4,550 60 | 844 23 | 306 31 | | | 3,372 06 | | 8 00 | 20 00 |
| Gladwin | 105 25 | 99 25 | 6 00 | | | | | | |

a Greater than the sum of the totals in the following columns by $42.85. See note *f*, page 33.

TABLE X—CONTINUED.

| COUNTIES. | TOTALS. | PAID FOR OFFICIAL SERVICES IN RELATION TO THE POOR. | | | | PAID FOR TRANSPORTATION TO AND FROM, AND SUPPORT AT PUBLIC INSTITUTIONS. | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | To Superintendents of the Poor. | To Supervisors. | To Justices of the Peace. | To Directors of the Poor. | Insane at Asylums. | Deaf and Dumb at Flint Institute. | Blind at Lansing Institute. | Poor Persons at Other Institutions. |
| Grand Traverse | $100 00 | $100 00 | | | | | | | |
| Gratiot | 988 70 | 304 00 | $69 50 | | | $615 20 | | | |
| Hillsdale | 1,545 73 | 210 00 | 67 75 | | | 1,267 98 | | | |
| Houghton | 2,958 57 | 1,000 00 | | | | 1,900 00 | $58 57 | | |
| Huron | 314 00 | 300 00 | 14 00 | | | | | | |
| Ingham | 3,457 40 | 900 10 | 38 00 | | | 2,446 40 | 72 90 | | |
| Ionia | 2,391 40 | 204 43 | 127 17 | | | 1,996 80 | 63 00 | | |
| Iosco | 747 68 | 310 29 | 3 36 | | | 389 78 | | | 44 25 |
| Isabella | 75 75 | | 75 75 | | | | | | |
| Jackson | 3,089 24 | 541 00 | 54 20 | | $500 00 | 1,994 04 | | | |
| Kalamazoo | 3,465 48 | 700 00 | 41 75 | | | 2,589 73 | 134 00 | | |
| Kalkaska | 300 00 | 300 00 | | | | | | | |
| Kent | 10,590 91 | 1,111 77 | 25 00 | | 1,600 00 | 7,321 22 | | *a* 10 15 | *b* 522 77 |
| Keweenaw | 1,264 82 | 750 00 | | | | 514 82 | | | |
| Lake | 282 82 | *c* 282 82 | | | | | | | |
| Lapeer | 2,178 85 | 433 63 | 72 10 | | | 1,637 13 | 35 99 | | |
| Leelanaw | 150 00 | 150 00 | | | | | | | |
| Lenawee | 4,392 03 | 681 25 | 563 25 | | | 3,090 53 | 5 00 | | *d* 52 00 |
| Livingston | 1,502 02 | 437 59 | 37 50 | | | 1,026 93 | | | |
| Mackinac | 105 00 | 105 00 | | | | | | | |
| Macomb | 1,542 09 | 211 40 | 194 45 | | | 1,136 24 | | | |
| Manistee | 2,869 00 | 600 00 | | | | 2,200 00 | 69 00 | | |
| Marquette | 1,939 91 | 1,200 00 | | | | 700 00 | 39 91 | | |
| Mason | 647 52 | 382 72 | 29 00 | | | 218 30 | | 17 50 | |
| Mecosta | 2,191 45 | 400 00 | 28 00 | | | 1,763 45 | | | |
| Menominee | 1,335 17 | 600 00 | | | | 664 79 | 70 38 | | |
| Midland | 937 64 | 468 47 | 86 40 | | | 382 77 | | | |
| Missaukee | 3 00 | | 3 00 | | | | | | |
| Monroe | 550 17 | 398 00 | 111 87 | | | 40 30 | | | |
| Montcalm | 2,690 57 | 450 00 | 461 03 | | | 1,764 54 | | | 15 00 |
| Muskegon | 3,591 12 | 750 00 | 32 25 | | 300 00 | 2,384 05 | | 51 82 | *e* 13 00 |
| Newaygo | 680 00 | 300 00 | 100 00 | | | 250 00 | | | 80 00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Oakland | 2,500 68 | 290 00 | 368 15 | | | 1,842 53 | | | |
| Oceana | 306 27 | 149 69 | 55 50 | | | 101 08 | | | |
| Ogemaw | 22 00 | 22 00 | | | | | | | |
| Ontonagon | 175 00 | 175 00 | | | | | | | |
| Osceola | 453 65 | 409 30 | 44 35 | | | | | | |
| Otsego | 296 82 | 183 62 | 84 95 | $28 25 | | | | | |
| Ottawa | 3,285 21 | 300 00 | 46 50 | | 115 00 | 2,823 71 | | | |
| Roscommon | 28 00 | 28 00 | | | | | | | |
| Saginaw | 5,604 09 | 500 00 | 101 71 | | 1,150 00 | 3,372 60 | | 125 00 | 354 78 |
| Sanilac | 876 91 | 450 00 | 34 50 | | | 392 41 | | | |
| Schoolcraft | 150 00 | 150 00 | | | | | | | |
| Shiawassee | 1,142 71 | 161 48 | 88 50 | | | 880 36 | | 12 37 | |
| St. Clair | 2,847 97 | 800 00 | 148 14 | | | 1,810 20 | 72 03 | 17 60 | |
| St. Joseph | 2,367 22 | | 111 50 | | | 2,177 82 | 77 90 | | |
| Tuscola | 2,472 17 | 439 00 | 102 36 | | | 1,888 96 | | | *e* 41 85 |
| Van Buren | *f* 3,148 48 | 301 36 | 114 50 | | | 1,815 01 | 700 16 | 174 60 | |
| Washtenaw | 4,216 24 | 139 25 | 128 28 | | | 3,908 71 | 40 00 | | |
| Wayne | 13,021 13 | 1,500 00 | | | 401 99 | 7,860 62 | | | *g* 3,258 52 |
| Wexford | 268 62 | 234 87 | 33 75 | | | | | | |

*a* Transportation for persons not admitted.
*b* For board at Union Benevolent and St. Mark's Homes.
*c* Including hotel bills, railroad fare, and other expenses.
*d* At Hillsdale County Poorhouse.
*e* Coldwater.
*f* Includes $4.35 for printing, $37.50 for books and stationery, and $1.00 for abstract of title to land, which are not included in the items.
*g* At hospital in city of Detroit.

## TABLE XI.

*Showing, for the State and Counties, the Estimated Value of the Paupers' Labor; the Estimated Total Value of the Products of the Poor-farms; the Value of Farm Products Sold, and the Per Cent of Total Value of Farm Products to Capital Invested in Farms and Appurtenances, for the year ending September 30, 1881.*

| STATE AND COUNTIES. | Value of Paupers' Labor. (Estimated.) | Value of all Farm Products. (Estimated.) | Value of Farm Products Sold. | Per Cent of Value of Farm Products to Capital Invested in Farms and Appurtenances. |
|---|---|---|---|---|
| STATE | $8,030 15 | $80,443 92 | $17,647 95 | *a* 10.67 |
| Alcona | ..... | $1,963 00 | $1,012 58 | 23.85 |
| Allegan | ..... | 1,568 00 | 443 84 | 11.57 |
| Alpena | $25 00 | 250 00 | 32 88 | 6.96 |
| Barry | 100 00 | 1,225 00 | 256 66 | 10.68 |
| Bay | 100 00 | 1,314 00 | 287 00 | 20.40 |
| Berrien | ..... | 3,257 30 | ..... | 14.99 |
| Branch | 150 00 | 1,764 00 | 101 00 | 12.33 |
| Calhoun | 625 00 | 1,839 23 | 101 28 | 8.92 |
| Cass | 200 00 | 2,643 20 | 1,585 37 | 11.51 |
| Clare | ..... | 289 00 | 69 50 | 5.37 |
| Clinton | ..... | 766 20 | 128 30 | 11.38 |
| Eaton | 325 00 | 1,740 60 | 283 72 | 8.54 |
| Genesee | 200 00 | 1,840 00 | 200 00 | 11.91 |
| Gratiot | ..... | 1,000 00 | ..... | 14.29 |
| Hillsdale | 600 00 | 1,800 00 | 633 33 | 11.43 |
| Houghton | 400 00 | 1,200 00 | 451 68 | 12.24 |
| Huron | 50 00 | 749 00 | 81 67 | 8.51 |
| Ingham | 200 00 | 950 00 | 167 00 | 4.19 |
| Ionia | 350 00 | 1,200 00 | 432 50 | 6.20 |
| Iosco | 100 00 | 2,322 05 | 414 87 | 24.59 |
| Isabella | ..... | 1,738 70 | 272 34 | 18.22 |
| Jackson | 50 00 | 2,100 00 | 414 20 | 17.18 |
| Kalamazoo | 100 00 | 1,500 00 | 640 85 | 9.86 |
| Kalkaska | ..... | 106 00 | ..... | 3.45 |
| Kent | 840 00 | 2,462 00 | 244 31 | 28.15 |
| Lapeer | 400 00 | 813 60 | 252 54 | 8.68 |
| Lenawee | 275 00 | 2,136 65 | 662 46 | 6.62 |
| Livingston | 100 00 | 1,907 00 | 847 27 | 12.80 |
| Macomb | 250 00 | 1,583 47 | 221 47 | 6.73 |
| Manistee | ..... | 1,060 20 | 253 70 | 7.87 |
| Marquette | 300 00 | 500 00 | ..... | 3.86 |
| Mason | 200 00 | 1,083 40 | ..... | 10.18 |
| Mecosta | 15 | 1,162 00 | ..... | 31.41 |
| Midland | 50 00 | 1,658 50 | 209 82 | 17.53 |
| Monroe | 200 00 | 3,469 90 | 1,301 02 | 8.50 |
| Montcalm | 300 00 | 1,610 00 | 90 75 | 15.65 |
| Muskegon | 40 00 | 300 00 | ..... | 7.60 |
| Newaygo | 100 00 | 100 00 | ..... | 14.29 |
| Oakland | 200 00 | 1,200 00 | 803 87 | 5.31 |
| Oceana | 50 00 | 1,336 50 | 552 66 | 11.61 |
| Osceola | 60 00 | 648 00 | 354 32 | 10.64 |

*a* Exclusive of Cheboygan, Menominee, and Ontonagon counties that did not report value of farm products.

TABLE XI—CONTINUED.

| COUNTIES. | Value of Paupers' Labor. (Estimated.) | Value of all Farm Products. (Estimated.) | Value of Farm Products Sold. | Per Cent of Value of Farm Products to Capital Invested in Farms and Appurtenances. |
|---|---|---|---|---|
| Ottawa | ..... | 1,331 00 | 566 92 | 16.42 |
| Saginaw | ..... | 2,300 00 | 300 00 | 14.11 |
| Sanilac | 40 00 | 645 00 | 36 00 | 7.10 |
| Shiawassee | 100 00 | 832 60 | 27 05 | 9.96 |
| St. Clair | 300 00 | 1,674 00 | 49 82 | 10.75 |
| St. Joseph | 50 00 | 1,106 00 | 319 50 | 10.83 |
| Tuscola | ..... | 1,714 00 | 1,400 00 | 13.24 |
| Van Buren | ..... | 2,848 23 | 848 23 | 23.99 |
| Washtenaw | 100 00 | 2,831 00 | 59 85 | 8.92 |
| Wayne | 500 00 | 6,880 59 | 185 82 | 7.82 |
| Wexford | ..... | 125 00 | 50 00 | 3.97 |

## TABLE XII.

*Showing, for the State and Counties, the estimated Total Value of Poor-farms and Appurtenances, the Value of Farms and Buildings, of Live Stock, Farm Implements, and of All Other Property on such farms, together with Interest at Seven Per Cent on Capital Invested, for the year ending September 30, 1881.*

| STATE AND COUNTIES. | Estimated Value of Farms and Appurtenances. | | | | | Interest at Seven Per Cent on Capital Invested. |
|---|---|---|---|---|---|---|
| | Totals. | Farms and Buildings. | Live Stock. | Farm Implements. | All Other Property. | |
| STATE | a$760,200 49 | $669,164 00 | $45,260 40 | $18,500 82 | $25,025 27 | $53,393 62 |
| Alcona | $8,230 00 | $7,527 00 | $703 00 | ..... | ..... | $576 10 |
| Allegan | 13,547 67 | b 11,000 00 | 1,093 50 | $467 05 | $987 12 | 948 34 |
| Alpena | 3,580 00 | 3,000 00 | 170 00 | 110 00 | 300 00 | 250 60 |
| Barry | 11,475 00 | 10,000 00 | 675 00 | 300 00 | 500 00 | 803 25 |
| Bay | 6,441 25 | 5,000 00 | 1,162 00 | 279 25 | ..... | 450 89 |
| Berrien | 21,735 53 | 16,000 00 | ..... | ..... | c 5,735 53 | 1,521 49 |
| Branch | 14,310 00 | 13,000 00 | 1,060 00 | 250 00 | ..... | 1,001 70 |
| Calhoun | 18,050 00 | 16,000 00 | 1,150 00 | 550 00 | 350 00 | 1,443 09 |
| Cass | 22,957 00 | 20,000 00 | 1,477 00 | 380 00 | 1,100 00 | 1,606 99 |
| Cheboygan | d 1,150 00 | e 1,000 00 | ..... | ..... | ..... | 80 50 |
| Clare | 5,385 00 | 4,500 00 | 300 00 | 95 00 | 490 00 | 376 95 |
| Clinton | 6,730 00 | 6,000 00 | 533 00 | 157 00 | 40 00 | 471 10 |
| Eaton | 20,389 00 | 18,050 00 | 1,089 00 | 725 00 | 525 00 | 1,427 23 |
| Genesee | 15,450 00 | 13,500 00 | 1,100 00 | 800 00 | 50 00 | 1,081 50 |
| Gratiot | 7,000 00 | 7,000 00 | ..... | ..... | ..... | 490 00 |
| Hillsdale | 15,750 00 | 14,000 00 | 1,500 00 | 250 00 | ..... | 1,102 50 |
| Houghton | 9,800 00 | 9,000 00 | 550 00 | 200 00 | 50 00 | 686 00 |
| Huron | 8,798 00 | 7,612 00 | 453 00 | 205 00 | 528 00 | 615 86 |
| Ingham | 22,700 00 | 20,000 00 | 1,100 00 | 600 00 | 1,000 00 | 1,589 00 |
| Ionia | 19,345 00 | 18,000 00 | 1,020 00 | 300 00 | 25 00 | 1,354 15 |
| Iosco | 9,442 00 | 8,275 00 | 515 00 | 152 00 | 500 00 | 660 94 |
| Isabella | 9,541 50 | 8,000 00 | 718 75 | 411 25 | 411 50 | 667 91 |
| Jackson | 12,227 00 | 10,000 00 | 927 00 | 600 00 | 700 00 | 855 89 |
| Kalamazoo | 15,208 10 | 12,000 00 | 1,632 60 | 375 50 | 1,200 00 | 1,064 57 |
| Kalkaska | 3,075 00 | 3,000 00 | ..... | ..... | 75 00 | 215 25 |
| Kent | 8,745 75 | 7,000 00 | 1,242 00 | 503 75 | ..... | 612 20 |
| Lapeer | 9,375 00 | 8,000 00 | 975 00 | 400 00 | ..... | 656 25 |
| Lenawee | 32,280 00 | 30,000 00 | 1,265 00 | 265 00 | 750 00 | 2,259 60 |
| Livingston | 14,893 00 | 12,700 00 | 1,361 00 | 322 00 | 510 00 | 1,042 51 |
| Macomb | 23,545 00 | 21,000 00 | 600 00 | 445 00 | 1,500 00 | 1,648 15 |
| Manistee | 13,469 60 | 12,000 00 | 407 25 | 255 85 | 806 50 | 942 87 |
| Marquette | 12,950 00 | 12,000 00 | 250 00 | 200 00 | 500 00 | 906 50 |
| Mason | 10,645 00 | 9,000 00 | 760 00 | 490 00 | 395 00 | 745 15 |
| Mecosta | 3,700 00 | 3,000 00 | 550 00 | 150 00 | ..... | 259 00 |
| Menominee | 4,050 00 | 4,000 00 | ..... | 50 00 | ..... | 283 50 |
| Midland | 9,462 50 | 8,000 00 | 752 50 | 460 00 | 250 00 | 662 38 |
| Monroe | 40,808 22 | 37,600 00 | 2,324 55 | 883 67 | ..... | 2,856 58 |

*a* Greater by $2,250 than the value of farms and appurtenances as itemized. See note *d*, and note *b* on next page.
*b* Copied from the report of 1880.
*c* Includes live stock, farm implements, and other property.
*d* Includes the value of a house and lot ($150), which seems to be additional to value of farm.
*e* Wild land.

TABLE XII.—CONTINUED.

| COUNTIES. | Estimated Value of Farms and Appurtenances. | | | | | Interest at Seven Per Cent on Capital Invested. |
|---|---|---|---|---|---|---|
| | Totals. | Farms and Buildings. | Live Stock. | Farm Implements. | All Other Property. | |
| Montcalm | $10,286 00 | $8,350 00 | $1,039 00 | $347 00 | $550 00 | $720 02 |
| Muskegon | 3,950 00 | 3,000 00 | 250 00 | 300 00 | 400 00 | 276 50 |
| Newaygo | 700 00 | 500 00 | 75 00 | 25 00 | 100 00 | 49 00 |
| Oakland | 22,580 00 | 20,000 00 | 1,480 00 | 600 00 | 500 00 | 1,580 60 |
| Oceana | 11,509 00 | 10,000 00 | 909 00 | 600 00 | ..... | 805 63 |
| Ontonagon | 3,500 00 | *a* 3,500 00 | ..... | ..... | ..... | 245 00 |
| Osceola | 6,091 82 | 4,000 00 | 675 00 | 268 00 | 1,148 82 | 426 43 |
| Ottawa | 8,108 00 | 6,000 00 | 1,174 00 | 664 00 | 270 00 | 567 56 |
| Saginaw | *b* 16,300 00 | 13,000 00 | 800 00 | 400 00 | ..... | 1,141 00 |
| Sanilac | 9,080 00 | 8,000 00 | 420 00 | 360 00 | 300 00 | 635 60 |
| Shiawassee | 8,358 00 | 8,000 00 | 268 00 | 90 00 | ..... | 585 06 |
| St. Clair | 15,567 00 | 14,000 00 | 1,253 00 | 314 00 | ..... | 1,089 69 |
| St. Joseph | 10,213 00 | 7,500 00 | 1,183 00 | 330 00 | 1,200 00 | 714 91 |
| Tuscola | 12,950 00 | 12,000 00 | 650 00 | 300 00 | ..... | 906 50 |
| Van Buren | 11,874 55 | 8,550 00 | 1,626 25 | 570 50 | 1,127 80 | 831 22 |
| Washtenaw | 31,742 00 | 30,000 00 | 1,042 00 | 700 00 | ..... | 2,221 94 |
| Wayne | 88,000 00 | 84,000 00 | 3,000 00 | 1,000 00 | ..... | 6,160 00 |
| Wexford | 3,150 00 | 3,000 00 | ..... | ..... | 150 00 | 220 50 |

*a* Copied from the report of 1880.
*b* Includes $2,100, the value of 65 acres of land detached from farm.

## SCHEDULE A.

*Statements of the Superintendents in relation to the condition of the poorhouses and other buildings, the facilities for bathing, warming, and ventilating; the treatment, food, and clothing of the paupers, the care of the sick, the accommodations for, and treatment of, the insane and idiotic, and the education of the children.*

*Alcona.*—The poorhouse and farm are located in the township of Greenbush, about six miles from the county seat. The house is rather poor. The barns, one for hay and one for grain, are large, well-built, and painted. Facilities for bathing are only tubs and pails. Buildings are warmed by three stoves, and ventilated by doors and windows. Treatment of paupers is good. There are no complaints. Food is first-rate. Most of the paupers are allowed to eat at table with the keeper and his family. Clothing is ample for both winter and summer. The sick are kindly cared for and have a good physician. The accommodations for the insane and idiotic are poor—only common rooms can be had. We have no children to educate. The nearest school is about three miles distant. The question of building a new poorhouse is before the board of supervisors.

*Allegan.*—The poorhouse is located in the township of Allegan, four and one-half miles west of north of the village. Poorhouse is a two-story wood building with stone basements. The wing is the same. The building for the insane is 100 feet from the poorhouse, built of wood, and has a stone basement. The building for the children's home and school is 20 rods from any other. It is two stories high with a stone basement. All the buildings are well painted and provided with window blinds. Have one large barn, horse barn, tool-house, hog-pen, wood-shed, wash-room with dry-room above, and other out-houses. Facilities for bathing are bath-room and bath-tubs. The poorhouse and the building for the insane are warmed by a furnace in the basement. The wing of the poorhouse, occupied by the keeper and his family, and the children's building, which is occupied by the teacher, nurse, and cook, are warmed by stoves. The ventilation is by means of transom sash over doors, and by raising and lowering windows. Paupers are treated with decision, but no corporal punishment is allowed. Some are occasionally placed in a cell and furnished bread and water until they promise obedience. Food consists of wheat bread, meal, pork, beef, fish, garden vegetables, fruit, etc. The clothing is woolen for the older and wool and cotton for the younger male paupers; some worsted but mostly print for females. Under-clothing is of flannel or worsted in winter. The sick are cared for by the hired help in the house, and volunteer help of the paupers. For the insane and idiotic, we have clean rooms, out-door exercise, and watchful care from help employed for their benefit. We have a school in a room designed expressly for this purpose in the children's building. The teacher is with them continually, and they have a nice lawn for play-ground.

*Alpena.*—The poorhouse is located about one mile from the business center of the township of Alpena. The buildings are of wood and in fair condition. The barns and out-houses are small. Facilities for bathing are tubs and pails and plenty of soft water. Buildings are warmed by wood stoves, ventilated by windows and transoms over the doors. Paupers are treated kindly. We have secured the services of Mr. and Mrs. George N. Benton for another year.

They have had charge of the house for the past five years, which is the best proof that can be given that the treatment of the inmates will be the very best. The food consists of all kinds of vegetables, fresh and salt meat, mush and milk, etc.—plenty of good, wholesome food, such as Michigan farmers generally have, and good enough for anybody. Clothing is good, warm, and comfortable, and adapted to the season. The sick have excellent care. Have no accommodations for insane and idiotic persons. Children are sent to the public school one-half mile from poorhouse. The poor-farm is a *poor farm*, the soil is light and sandy, and very little can be raised without much hard work. It will be years before it will be very productive.

*Antrim.*—No poorhouse nor farm.

*Baraga.*—No poorhouse nor farm.

*Barry.*—The poorhouse is situated in the township of Hastings, about three and one-half miles southeast of the city of Hastings. It is a substantial brick building, with an upright front 32x44 ft., and a wing 26x66 ft. It is two stories high above the basement, which is also entirely above ground on the east side. The building is in fine condition, and will accommodate from 35 to 40 paupers. There is also a building used for a wood-house, hog-pen, tool-house, and store-room; also a hay and grain barn, horse barn, and granary, all in excellent condition. For bathing, there is a bath-room in the basement. Building is warmed by two hot-air furnaces. Ventilation is by means of transoms over doors, movable sash in windows, and by "base ventilation." Paupers are treated kindly. Their food consists of bread, butter, beef, pork, potatoes, and other vegetables, with tea and milk for drink. The clothing is cottonade and calico dresses in summer, and woolen goods and knit underwear in winter. The sick have medical treatment and extra care when necessary. No insane are kept at the poorhouse. Children are sent to district school when of school age.

*Bay.*—The poorhouse is a frame building, located in the township of Hampton, about two and one-half miles from the village of Essexville, and about four and one-half miles from Bay City, the county seat. It is in good repair and is all that could be desired. A short distance from the poorhouse is a frame building which is used as an asylum for the insane and idiotic. It will accommodate eighteen persons without crowding. The apartments are so divided as to keep the male and female inmates entirely separate. The buildings used for the farm are about fifteen rods from the house. They are in fair condition, and with some addition, which is intended to be made, will be large enough to store the grain and vegetables grown on the farm. The farm consists of one hundred and twenty acres of land, a greater part of which is not very good, being low and swampy and difficult to drain. The facilities for bathing are bath-tubs, and each inmate is required to bathe frequently. Inmates are required to bathe on arrival, and are then provided with clean clothes. The rooms in each department are warmed by large wood stoves. The males and females occupy entirely separate apartments, and are not allowed to eat at the same table. The rooms are properly ventilated by transoms over the doors, and the windows in each room can be opened when further ventilation is required. Paupers are treated kindly. This is not a set phrase but a fact. Both the keeper and his good wife have the faculty of commanding obedience without using force. We have punished only one during the year, and twenty-four hours in solitary confinement in a warm room brought a promise of obedience. Food is of good quality and generously supplied. It

TABLE IX.—CONTINUED.

| COUNTIES. | Expenditures for Temporary Relief. | | | | | | | | Cost of Maintaining Permanent Paupers outside the Poor-houses. |
|---|---|---|---|---|---|---|---|---|---|
| | Totals. | Medical Attendance and Medicines. | Funeral Expenses. | Food Purchased. | Fuel Purchased. | Clothing Purchased. | Miscellaneous. | Transportation (anywhere except to and from Poorhouses and public institutions.) | |
| Ontonagon | $2,726 82 | $258 16 | $31 50 | $1,630 17 | $576 74 | $47 25 | $183 00 | ..... | ..... |
| Osceola | 1,934 15 | 650 32 | 173 22 | 780 87 | 13 83 | 144 28 | 24 58 | $147 05 | ..... |
| Otsego | 337 62 | 19 30 | 22 00 | 181 05 | 7 50 | 3 63 | 22 22 | 81 92 | ..... |
| Ottawa | 5,852 93 | 594 00 | 135 00 | 3,883 97 | 360 14 | 280 00 | 486 97 | 112 85 | ..... |
| Roscommon | 134 75 | 57 00 | ..... | 37 25 | ..... | ..... | ..... | 40 50 | ..... |
| Saginaw | 15,785 76 | 2,041 42 | 942 30 | 9,204 43 | 1,592 42 | 591 56 | 923 33 | 490 30 | $91 00 |
| Sanilac | 4,038 60 | 564 76 | 140 40 | *a* | *a* | *a* | *b* 3,195 89 | 137 55 | ..... |
| Schoolcraft | 363 71 | 71 10 | 49 75 | 151 42 | 28 40 | 37 04 | 11 00 | 15 00 | ..... |
| Shiawassee | 2,718 29 | 1,418 29 | 138 75 | 864 63 | 34 53 | 180 64 | 8 50 | 72 95 | 217 01 |
| St. Clair | 10,313 70 | *c* 1,149 57 | *c* 221 00 | *c* 6,972 97 | *c* 273 90 | *c* 1,170 50 | 373 96 | 151 80 | *d* |
| St. Joseph | 4,564 91 | 838 67 | 198 40 | 1,805 10 | 599 02 | 622 51 | 392 51 | 108 70 | 689 00 |
| Tuscola | 3,654 14 | 1,211 75 | 293 04 | 1,600 00 | 75 00 | 400 00 | 74 35 | ..... | ..... |
| Van Buren | 3,146 96 | 1,055 11 | 278 22 | 887 91 | 124 42 | 493 08 | 251 02 | 57 20 | 1,544 42 |
| Washtenaw | 3,064 77 | 506 25 | 148 95 | 1,481 63 | 436 81 | 161 92 | 90 00 | 239 23 | ..... |
| Wayne | 44,904 08 | 9,902 41 | 3,974 42 | 19,267 25 | 6,899 48 | 1,744 19 | 1,784 90 | 1,331 43 | 666 54 |
| Wexford | 2,103 14 | 1,109 57 | 203 00 | 637 01 | 16 00 | 67 31 | 13 25 | 57 00 | 363 81 |

*a* See note *b*.
*b* Includes cost of food, fuel, and clothing.
*c* "Approximate amount."
*d* "Can't tell."

# TABLE X.

*Showing, for the State and Counties, the amounts paid to Superintendents and Directors of the Poor, and to Supervisors and Justices of the Peace, for official services in relation to the poor, and the amounts paid for transportation to and from, and support of poor persons at, public institutions, for the year ending September 30, 1881.*

| STATE AND COUNTIES. | TOTALS. | PAID FOR OFFICIAL SERVICES IN RELATION TO THE POOR. | | | | PAID FOR TRANSPORTATION TO AND FROM, AND SUPPORT AT PUBLIC INSTITUTIONS. | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | To Superintendents of the Poor. | To Supervisors. | To Justices of the Peace. | To Directors of the Poor. | Insane at Asylums. | Deaf and Dumb at Flint Institute. | Blind at Lansing Institute. | Poor Persons at Other Institutions. |
| STATE | a$129,515 93 | $27,487 06 | $4,840 29 | $28 25 | $4,192 24 | $86,426 66 | $1,676 02 | $434 89 | $4,387 67 |
| Alcona | $538 10 | $275 00 | | | | $263 10 | | | |
| Allegan | 2,325 51 | 603 75 | $122 85 | | | 1,486 36 | $108 55 | | $4 00 |
| Alpena | 1,009 84 | 540 00 | 39 00 | | | 430 34 | | | |
| Antrim | 1,230 05 | 267 52 | 73 50 | | | 889 03 | | | |
| Baraga | 150 00 | 150 00 | | | | | | | |
| Barry | 2,478 29 | 235 00 | 44 50 | | | 2,135 06 | 58 73 | | |
| Bay | 3,055 85 | 450 00 | 48 97 | | | 2,539 03 | | $17 85 | |
| Benzie | 198 62 | 87 88 | 11 25 | | | 99 49 | | | |
| Berrien | 474 04 | 290 04 | 184 00 | | | | | | |
| Branch | 1,429 02 | 240 00 | 62 87 | | | 1,108 75 | 17 40 | | |
| Calhoun | 3,455 87 | 863 50 | 59 75 | | | 2,482 37 | 50 25 | | |
| Cass | 991 16 | 298 00 | 60 50 | | | 598 91 | 2 25 | | 31 50 |
| Charlevoix | 74 61 | 39 45 | 35 16 | | | | | | |
| Cheboygan | 77 50 | 77 50 | | | | | | | |
| Chippewa | 200 00 | 200 00 | | | | | | | |
| Clare | 133 90 | 133 90 | | | | | | | |
| Clinton | 1,214 27 | 146 00 | 2 50 | | | 1,065 77 | | | |
| Crawford | 225 00 | 150 00 | 9 75 | | $65 25 | | | | |
| Delta | 319 00 | 150 00 | | | | 169 00 | | | |
| Eaton | 3,143 74 | 450 00 | 75 36 | | | 2,618 38 | | | |
| Emmet | 80 00 | 80 00 | | | | | | | |
| Genesee | 4,550 60 | 844 23 | 306 31 | | | 3,372 06 | | 8 00 | 20 00 |
| Gladwin | 105 25 | 99 25 | 6 00 | | | | | | |

a Greater than the sum of the totals in the following columns by $42.85. See note *f*, page 33.

TABLE X—CONTINUED.

| COUNTIES. | TOTALS. | PAID FOR OFFICIAL SERVICES IN RELATION TO THE POOR. | | | | PAID FOR TRANSPORTATION TO AND FROM, AND SUPPORT AT PUBLIC INSTITUTIONS. | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | To Superintendents of the Poor. | To Supervisors. | To Justices of the Peace. | To Directors of the Poor. | Insane at Asylums. | Deaf and Dumb at Flint Institute. | Blind at Lansing Institute. | Poor Persons at Other Institutions. |
| Grand Traverse | $100 00 | $100 00 | | | | | | | |
| Gratiot | 988 70 | 304 00 | $69 50 | | | $615 20 | | | |
| Hillsdale | 1,545 73 | 210 00 | 67 75 | | | 1,267 98 | | | |
| Houghton | 2,958 57 | 1,000 00 | | | | 1,900 00 | $58 57 | | |
| Huron | 314 00 | 300 00 | 14 00 | | | | | | |
| Ingham | 3,457 40 | 900 10 | 38 00 | | | 2,446 40 | 72 90 | | |
| Ionia | 2,391 40 | 204 43 | 127 17 | | | 1,996 80 | 63 00 | | |
| Iosco | 747 68 | 310 29 | 3 36 | | | 389 78 | | | 44 25 |
| Isabella | 75 75 | | 75 75 | | | | | | |
| Jackson | 3,089 24 | 541 00 | 54 20 | | $500 00 | 1,994 04 | | | |
| Kalamazoo | 3,465 48 | 700 00 | 41 75 | | | 2,589 73 | 134 00 | | |
| Kalkaska | 300 00 | 300 00 | | | | | | | |
| Kent | 10,590 91 | 1,111 77 | 25 00 | | 1,600 00 | 7,321 22 | | *a* 10 15 | *b* 522 77 |
| Keweenaw | 1,264 82 | 750 00 | | | | 514 82 | | | |
| Lake | 282 82 | *c* 282 82 | | | | | | | |
| Lapeer | 2,178 85 | 433 63 | 72 10 | | | 1,637 13 | 35 99 | | |
| Leelanaw | 150 00 | 150 00 | | | | | | | |
| Lenawee | 4,392 03 | 681 25 | 563 25 | | | 3,090 53 | 5 00 | | *d* 52 00 |
| Livingston | 1,502 02 | 437 59 | 37 50 | | | 1,026 93 | | | |
| Mackinac | 105 00 | 105 00 | | | | | | | |
| Macomb | 1,542 09 | 211 40 | 194 45 | | | 1,136 24 | | | |
| Manistee | 2,869 00 | 600 00 | | | | 2,200 00 | 69 00 | | |
| Marquette | 1,939 91 | 1,200 00 | | | | 700 00 | 39 91 | | |
| Mason | 647 52 | 382 72 | 29 00 | | | 218 30 | | 17 50 | |
| Mecosta | 2,191 45 | 400 00 | 28 00 | | | 1,763 45 | | | |
| Menominee | 1,335 17 | 600 00 | | | | 664 79 | 70 38 | | |
| Midland | 937 64 | 468 47 | 86 40 | | | 382 77 | | | |
| Missaukee | 3 00 | | 3 00 | | | | | | |
| Monroe | 550 17 | 398 00 | 111 87 | | | 40 30 | | | |
| Montcalm | 2,690 57 | 450 00 | 461 03 | | | 1,764 54 | | | 15 00 |
| Muskegon | 3,591 12 | 750 00 | 32 25 | | 300 00 | 2,384 05 | | 51 82 | *e* 13 00 |
| Newaygo | 680 00 | 300 00 | 100 00 | | | 250 00 | | | 30 00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Oakland | 2,500 68 | 290 00 | 368 15 | | | 1,842 53 | | | |
| Oceana | 306 27 | 149 69 | 55 50 | | | 101 08 | | | |
| Ogemaw | 22 00 | 22 00 | | | | | | | |
| Ontonagon | 175 00 | 175 00 | | | | | | | |
| Osceola | 453 65 | 409 30 | 44 35 | | | | | | |
| Otsego | 296 82 | 183 62 | 84 95 | $28 25 | | | | | |
| Ottawa | 3,285 21 | 300 00 | 46 50 | | 115 00 | 2,823 71 | | | |
| Roscommon | 28 00 | 28 00 | | | | | | | |
| Saginaw | 5,604 09 | 500 00 | 101 71 | | 1,150 00 | 3,372 60 | | 125 00 | 354 78 |
| Sanilac | 876 91 | 450 00 | 34 50 | | | 392 41 | | | |
| Schoolcraft | 150 00 | 150 00 | | | | | | | |
| Shiawassee | 1,142 71 | 161 48 | 88 50 | | | 880 36 | | 12 37 | |
| St. Clair | 2,847 97 | 800 00 | 148 14 | | | 1,810 20 | 72 03 | 17 60 | |
| St. Joseph | 2,367 22 | | 111 50 | | | 2,177 82 | 77 90 | | |
| Tuscola | 2,472 17 | 439 00 | 102 36 | | | 1,888 96 | | | *e* 41 85 |
| Van Buren | *f* 3,148 48 | 301 36 | 114 50 | | | 1,815 01 | 700 16 | 174 60 | |
| Washtenaw | 4,216 24 | 139 25 | 128 28 | | | 3,908 71 | 40 00 | | |
| Wayne | 13,021 13 | 1,500 00 | | | 401 99 | 7,860 62 | | | *g* 3,258 52 |
| Wexford | 268 62 | 234 87 | 33 75 | | | | | | |

*a* Transportation for persons not admitted.
*b* For board at Union Benevolent and St. Mark's Homes.
*c* Including hotel bills, railroad fare, and other expenses.
*d* At Hillsdale County Poorhouse.
*e* Coldwater.
*f* Includes $4.35 for printing, $37.50 for books and stationery, and $1.00 for abstract of title to land, which are not included in the items.
*g* At hospital in city of Detroit.

become permanent charges. We let the keeping of the paupers to the lowest responsible bidder. This year we pay $900 for keeping ten paupers,—the keeper to have the use of the farm and paupers' labor, to furnish all help, food, clothing, and nursing for the sick. When the number of paupers exceeds ten the keeper is to receive $1.50 per week for every such excess, and to deduct from said $900 $1.50 per week for all under that number.

*Hillsdale.*—Poorhouse is located in the township of Cambria. The bathing facilities are one room for the men in their house, and one for the females in their house. Pails and tubs are used, and all are required to bathe at least once each week. Buildings are warmed by stoves and dummies so arranged that every room is well warmed. Ventilation is by means of windows that are raised or lowered. Paupers are all kindly cared for, and well fed and clothed. They have three meals each day except in winter, when those who labor and the sick and children have a lunch. We put down 8,000 to 9,000 pounds of best pork, two or three beef cattle, and sheep as we want them. We raise all kinds of vegetables and grains that are usually raised by good farmers. We employ a baker, and consequently have good bread. Usually we have an abundance of all kinds of fruit, but this year we have very little. The food is well prepared and cooked. We keep fifteen cows and use all the milk and butter, use from 80 to 100 gallons of good syrup, plenty of sugar, etc. Many of the paupers work, and all live well. Many of the old and feeble and the children have flannel for underwear, and many old men have woolen clothes. Most of those who labor, and the insane and idiotic, have the heaviest cottonades lined with heavy factory for cold weather, and denims for summer. The females have flannel underclothes, and calico and denims for dresses. All have good shoes,—boots and mittens for those who labor. We have no hospital. We place the sick in the best quarters we can. If very sick or insane they are well cared for by the keeper and his wife,—if not very sick, by some one appointed to care for them. All is done under the direction of the attending physician. We have very little sickness among those who are residents of the house. The sick are mostly those who are sick when brought here. For the insane and idiotic we have comfortable cells so constructed that they are light, and are well warmed in cold weather. We have two who are kept in cells most of the time, and one all the time. The greater number of them do more or less work during the day, and at night are kept so that they can do no harm. We think a proper amount of labor the best treatment they can receive. Most of the cases are chronic. Children are sent to school one mile distant, but we send them to the State Public School or put them out in the country as soon as possible.

*Houghton.*—The poorhouse is located in the township of Hancock, on the south shore of Portage Lake. The land is poor and stony. Buildings are in good condition and well ventilated. Our facilities for bathing are only wash-tubs. Buildings are warmed by large wood stoves, and ventilated by tin ventilators in windows. Paupers are kindly treated, but with firmness. We have three meals a day,—vegetables and meat for dinner, tea twice a day, and the invalids are fed according to the order of the county physician. The clothing is warm and heavy—suited to the climate. Our hospital is under the charge of the county physician. Have no accommodations for the insane,—send them to Kalamazoo. We have six months' school during winter if there is a sufficient number of children.

*Huron.*—The poorhouse is located in the township of Colfax. It is a frame building in good repair. Pails and tubs are used for bathing. The building is

warmed by stoves and ventilated by fan lights, and by doors and windows. Paupers are well treated. Food consists of bread, pork, beef, and vegetables of all kinds,—in fact regular farmers' fare. The clothing is of woolen and cottonades. The sick have good care. Have no insane nor idiotic. Children are sent to district school.

*Ingham.*—The poorhouse, located in the township of Meridian, was built in 1879 and is in good repair. The barns and out-buildings are in good condition. The facilities for bathing are bath-tubs in warm and convenient rooms in the basement, supplied with warm or cold water as required. All inmates are required to bathe once a week if not ill. Buildings are warmed by furnaces in the basement, and by stoves in the halls, and are ventilated by perforated transoms, baseboards, and by raising or lowering windows. The discipline is mild except in cases of extreme insubordination, when confinement in a grated cell and diet of bread and water is resorted to. Have plain farmers' food, of good quality and well cooked,—three meals a day except in short days of winter. The clothing is comfortable at all times. Paupers have woolen underwear for winter. A competent physician is employed by the year to attend the sick. Nurses are chosen from among the most intelligent and healthy inmates. These wait upon the sick and infirm. Rooms have been prepared especially for the insane, that they may be separated from other paupers. There is a district school near by, which all children of proper age and sound mind are required to attend.

*Ionia.*—The poorhouse is located in the township of Ronald. The farm contains 159 acres. Pails and tubs are used for bathing. Buildings are warmed by furnace and stoves, and ventilated by the Ruttan system and by windows and transoms. Paupers are treated kindly. No corporal punishment is allowed except sometimes in the case of children. If adults are unruly or disorderly they are confined on short rations. The food used is the same as that provided by most farmers for their tables. It is well cooked and consists of wheat and corn bread, pork, beef, mutton and fish, potatoes, cabbage, and other vegetables, besides beans, butter, milk, etc. Good, plain, comfortable clothing is furnished. The men's outer garments are mostly purchased ready made. The under garments are nearly all made at the poorhouse. The dresses for the females are of prints, and all their garments are made at the poorhouse. We have a hospital or sick-room for the male inmates of the house. The females are nursed and treated in their respective rooms. A good physician is called when needed, and the sick have as good care as is practicable in a home of this kind. Our accommodations for the insane and idiotic are very limited. The poorhouse was not built with any special arrangement for these classes, hence but few are kept, and most of these are harmless. We have but three children capable of learning, and they have attended the district school the last year. We pay the keeper $700, and he does all the work both on the farm and in the house, except the labor of one man, and extra work in harvest, etc., which we pay for.

*Iosco.*—The poorhouse is located in the township of Tawas, is old and out of repair, but a new one has been put up during the year at a cost of $1,275. The barns are good but not sufficient. We have no facilities for bathing other than bowls and wash-tubs. Building is warmed by wood fires, and ventilated by doors and windows. The treatment of paupers is excellent in all respects. They have wholesome farm living, and their clothing is comfortable and suited to the climate and season. The sick have home nursing, and are

treated by capable physicians. No accommodations for insane and idiotic persons. Children are sent to the district school.

*Isabella.*—The poorhouse is located in Chippewa township. The buildings are in first-class condition. Have no bath-room nor tubs. Building is warmed by ordinary wood stoves, and ventilated by transoms over doors. Treatment of paupers is mild and gentle. Food consists of farmers' fare. Clothing is as good as that worn by average farmers. The sick are cared for by the overseer and his help. The insane and idiotic have no special treatment. We have no children in the county house. There is a district school within half a mile.

*Jackson.*—The poorhouse is located in the township of Blackman. It is a very poor house, but we shall have a new one next year, as a special tax was voted for that purpose last April. The barn is in excellent condition. We use bath-tubs for bathing, and all are required to keep themselves clean. Building is warmed by wood and coal stoves, and ventilated by windows. Paupers are kindly treated. All who are able are required to perform labor on the farm and in the garden according to physical condition. Food is plain and wholesome and of about the same quality as is usually found on farmers' tables, viz.: wheat and corn bread, beef and salt pork, tea, coffee, and buttermilk for drink, fruit and vegetables in abundance. The clothing is plain. We seek to combine comfort and economy in the matter of clothing. The sick are cared for by a faithful and competent physician, who is employed by the county at a regular annual salary. They have good attention, but at present the accommodations are very poor. We hope to have better in our new house. The accommodations for the insane and idiotic are very inadequate. Part of the year children attend the district school which is near by.

*Kalamazoo.*—The poorhouse is located in the township of Comstock. The house was originally built for the Fourierites, and is not just what we would like for a poorhouse. Our county fathers do not see the need of a better building. We have added a cook-room to the building in the last two years. This season we have erected a good and substantial wash-house, and put in a stove and kettle. Our facilities for bathing are a bath-tub in the wash-house. The paupers are required to bathe once a week. Buildings are warmed by a furnace and three stoves, and ventilated by doors and windows. The paupers are kept in a comfortable condition. We have a man and his wife who have been the overseers for the last eleven years. Food consists of bread, pudding, mush and milk, pork, beef, fish, potatoes, turnips, eggs in their season, occasionally chicken, apple sauce, garden vegetables, etc. Paupers have clothing in plenty to keep them warm, and they are all well shod. We have a building separate from the main one, in which the sick are cared for by some of the inmates of the poorhouse. A physician is hired by the year, and he attends the sick as often as necessary. There has been no sickness among the paupers during the last year. There occurred two deaths, one of a tramp who had a cancer in the stomach, the other was that of an old man who was brought to the poorhouse in a bad condition. The insane, as they cause no trouble, are allowed to roam on the farm, except one, who is kept in a room by herself, as she is liable to wander away. There are none so idiotic but that they care for themselves mostly. There is only one that is perfectly idiotic. There is only one child here whose intellect is unimpaired, and we expect that he will not be with us long. We understand that his father, who is west, will send for him, and if he does not, we shall endeavor to get him in at the State Public School.

*Kalkaska.*—The poorhouse is located in the township of Clearwater. It is a neat frame building, 18x24 feet, with a log house in the rear that contains a

cook-room, dining-room, and sleeping-rooms. There is a granary 16x23 feet, a wood-shed, log barn, and other out-buildings. Tubs are used for bathing purposes. Buildings are warmed by two wood stoves, and ventilated by windows let down from the top, and by transoms over doors. Paupers are treated kindly and are under good influence. Food is the same as that generally used in farm-houses, and the clothing the same as that worn by the laboring class. The sick are attended by a county physician who is hired by the year, and nurses are furnished when necessary. We have no special accommodations for insane and idiotic persons. Children attend the district school one mile away.

The poor-farm consists of 174 acres of land, 47 acres of which are cleared, fenced, and under a good state of cultivation. It rents for $106 per year, the tenant being the keeper of the poorhouse. He receives $2.50 per week for each pauper's board, washing, and mending. He has extra pay for the care of the sick.

*Kent.*—The poorhouse is in the township of Paris. The general condition of the house and other buildings is good. For bathing we have bath-rooms. The building appropriated to the use of the insane and idiotic is warmed by furnace, the other buildings by stoves. Ventilation is by transoms over doors and windows, grated windows, and ventilating shafts. Treatment of paupers is kind and humane. Food consists of beef, pork, fish, wheat and brown bread, and vegetables of all kinds. Clothing is good and comfortable and adapted to the season. The sick have good care. The building for the insane and idiotic is separate from main building, and it is warmed by a furnace, well ventilated, and furnished with bath-room. There is a small yard adjoining. No children are kept at the county-house—all under our charge of suitable age are sent to school.

*Keweenaw.*—The building occupied as a poorhouse is situated in the village of Eagle Harbor. It is a frame building, with proper out-buildings, all in good repair. The county does not own a poorhouse, but rents a building for the purpose. There are no bath-tubs in the house; bathing facilities are the same as in ordinary dwellings. The building is warmed by wood stoves, and the ventilation is good. The paupers are kindly cared for; they have plain, substantial food, and in sufficient quantity. Every inmate is properly clothed. We have a regular attending physician who furnishes the necessary medicines, and the keeper attends to the nursing. We have no insane and idiotic and no children in the poorhouse. The superintendents of the poor contract with a responsible party for the board, washing, sewing, mending, and nursing, also fuel and lights, for all inmates of the poorhouse at a stated sum per month, the expense last year being $12 per month for each pauper.

*Lake.*—No poorhouse nor farm.

*Lapeer.*—The poorhouse is located in the township of Mayfield. The condition of the house and other buildings is good for wooden structures. For bathing there is plenty of soft water which is heated in large boilers over stoves. For the men there is a bath-room which is connected with the hospital room, and for the women another which is warmed by a drum. The building is warmed by stoves below and drums on the second floor except one room. The ventilation is effected by lowering windows, and by ventilators in the side walls at top and bottom of the rooms. The bottom ventilators connect with chimneys. The treatment of paupers is designed to be humane in every respect. The food consists of tea, coffee, good bread and butter, potatoes and meat, and a change from salt pork to beef once or twice a week, with such variety of

vegetables as are usually found on farmers' tables. The clothing is principally heavy cottonades for men's wear except when woolen underclothing is needed for the aged or sick, prints for women's dresses, and woolen and cotton socks and stockings. We try to give the sick all the attention that can be given in an establishment of this kind. Our physician is now employed by the year. For the insane and idiotic we have what we call a crazy house, provided with cells and warmed by a stove. We send children to district school,—but send all to the State school that can be admitted, so that very few of reasonable intellect remain in the county house.

*Leelanaw.*—No poorhouse [nor farm].

*Lenawee.*—The county house is located in the township of Madison. All the buildings are in good condition. The barns were new last year. For bathing purposes there is a tank in the house which is supplied with water by a windmill. Tubs are used for bathing. Buildings are warmed by steam mostly,—a few stoves are used,—and ventilated by flues and windows. Treatment of paupers is kind and humane. No corporal punishment is allowed. Food is abundant and wholesome, consisting of bread, beef, pork, potatoes and other vegetables, tea, coffee, milk and butter, poultry and eggs. Clothing is warm and comfortable, woolen in winter and cotton in summer. The sick are always kindly nursed and cared for. But few insane or idiotic in the county house and those cases are of a mild type. Their treatment is kind and considerate. There are cells in the house, but they are seldom used. The children that are able to attend school are sent to a district school near by.

*Livingston.*—The poorhouse is located in the township of Marion, six miles from the county-seat, on a farm of two hundred and fifteen acres, one hundred acres of which are improved. The building, which is a large farm-house, is occupied by the keeper, the female paupers, and children. There is also a two-story brick house 20x34 feet, which is occupied by the male paupers. We have a hay and grain barn 32x56 feet, with basement, one horse-barn 28x44 feet, a corn and hog house 20x40 feet, also a new wash-house. All are painted and in good repair. We have no facilities for bathing. Buildings are warmed by stoves with wood for fuel, and ventilated by doors and windows. The paupers are kindly treated, being allowed to go in and out at their pleasure. The males perform light labor on the farm, and the females light labor in the house if able. Food is good and plain,—wheat bread, pork, beans, potatoes and such other vegetables as farmers use, also tea and coffee. Inmates are provided with woolen clothing in winter, and light clothing in summer. The sick are kindly treated by the keeper, and a competent physician is employed by the year. The insane are all at the Eastern Asylum. The children of suitable age are sent to the district school three-fourths of a mile away. The keeper and his wife are hired by the year.

*Mackinac.*—No poorhouse nor farm.

*Macomb.*—[No statement made this year, hence we copy that of last year.] Poor-farm is in the township of Clinton. The poorhouse and one detached building are of brick, other buildings are of wood, and all are in good repair. Facilities for bathing are tubs, brushes, and plenty of soft water. Buildings are warmed by stoves with well-seasoned wood for fuel. A coal stove is used in the keeper's department. Ventilation is by means of doors and windows. Treatment of paupers is as kind as can be under the circumstances. Those who are able are required to labor, both in the house and out of doors. No force is allowed in controlling them. Obstinate paupers are sometimes confined, and their tobacco withheld for a time, but those cases are very rare.

We have them classed so that the filthy ones are kept by themselves. Food consists of wheat and corn bread, buckwheat cakes, pork, beef, and fish. It is all prepared and cooked by the matron, with the help of some of the paupers. Meals are served three times per day for about nine months in the year; two meals, with lunch for those who chop or do hard work, the remainder of the year. Tea is served twice a day to the women, and coffee once a day to the men. Clothing for the men is mostly heavy cottonade, much of which is bought ready-made; the rest is made by the matron in the house. Those who are out of doors the most have flannel under-clothing. The women are mostly dressed in calico, with suitable under-clothing; some of those who are inclined to tear off their clothing have stronger than calico. Socks are knit in the house, and mittens of good cloth are largely made in the house. We buy a few leather mittens. Paupers when very sick are kept in the hospital, separate from the main building, and some of the most reliable ones remain with them. A physician is employed at $1.25 per visit, and called when the keeper thinks necessary. A good supply of medicines is usually kept on hand at the poorhouse. The violently insane have been sent to the asylum, but we have quite a number of mildly insane. As a general thing they are allowed their liberty about the premises. The constant desire of some of them to escape gives the keeper a great deal of trouble, and requires close watch all the time. We have had to bring one back from the asylum to make room for one lately become insane. The idiotic are cared for in a separate building, with some one of the paupers detailed to see to them. Children are sent to the State Public School.

*Manistee.*—The poorhouse, located in the township of Manistee, is, in every respect, in first-class condition. We have no facilities for bathing except wash-tubs; have urged supervisors to let us build an addition to the house, but they think the county cannot afford it for a year or two yet. Building is warmed by common wood and coal stoves. No ventilation except by windows and doors. Paupers are treated humanely in every respect. No punishments are inflicted. They are controlled exclusively through kindness and reason. Food consists of meat, bread, vegetables of all kinds, syrup, milk, tea, coffee, and other articles as nice and wholesome as in any ordinary boarding house. The clothing is good and warm, such as any well-to-do workingman would ordinarily wear. We take excellent care of the sick,—a physician visits the poorhouse twice a week, and oftener if needed. We have no accommodations for the insane and idiotic. There is a district school close by, and all of school age are sent regularly to school.

*Marquette.*—[Superintendents say there is no material change since last report, hence we copy.] The county farm and poorhouse are located within the limits of the city of Marquette. The poorhouse is nearly new and in good condition, and well adapted to the purposes for which it is used. The old poorhouse, which is only a few feet from the new one, is used for a store-house, wash-house, etc. We are in need of a new barn, the one now on the farm not being large enough. Facilities for bathing are excellent, there being a bath-room always supplied with hot and cold water. One of the rules of the house is that every inmate frequently bathe, and under all circumstances be clean in person. The house is warmed throughout by steam, with radiators in all the halls and rooms, the building being so arranged that by the use of ventilators any desired temperature can be had. The house is ventilated by air-flues, which are throughout the walls of the building and have open regis-

ters. Whenever these may be found insufficient, for any temporary ventilation—and in fact nearly every day—the windows are thrown open for a short time. Treatment of paupers is humane; the sick and debilitated are tenderly cared for. It is this class that makes up the larger portion of our inmates, and they receive such treatment as is usually adopted in hospitals. To chronic idlers, dead-beats, and parasites on the charity of honest tax-payers, this is no home. We have a rule which we require compliance with, viz., *work*. Food is good, wholesome, and substantial; plenty of it properly prepared, and adapted to the requirements of the inmates. Clothing is plain, substantial, and sufficient, adapted to the climate and temperature, and is furnished to meet all necessities. For the sick, the usual hospital treatment is adopted as far as practical, such medical care being provided as is suitable to the case, with every attention that it is possible to furnish. This department is subjected to especially strict rules tending to the comfort of the afflicted. We have cells for the insane, who are detained only temporarily, all such being sent to the asylum at Kalamazoo. The entirely destitute children we send to the State Public School; all others are sent to the city public schools.

*Mason.*—The poorhouse is located in the township of Amber. The buildings are only two years old, and are in good condition. The bathing facilities consist of bath-tub. Buildings are warmed by stoves throughout. Have no special ventilation. Paupers are given all they can eat and wear, and are treated as kindly as though they were a part of the family. Food is such as can be raised on a good farm, with the best groceries obtainable. Clothing is plain and cheap. The sick have good medical attendance and care. Have no accommodations for insane and idiotic. Children attend district school three-fourths of a mile distant.

*Mecosta.*—The poorhouse is located in the township of Big Rapids. The buildings are in good repair. The facilities for bathing are wash-tubs. Buildings are warmed by stoves and ventilated by doors and windows. The treatment of paupers is as good as can be given and live in the same house with them. Food is good and substantial, and the clothing is good and comfortable. The sick are well attended. We are constructing a building separate from the poorhouse for the insane and idiotic. Children attend district school.

*Menominee.*—The poorhouse, located in the township of Menominee, is in good condition. Have no facilities for bathing. Building is warmed by stoves and ventilated by doors and windows. The paupers have the best of treatment and first-class food. No clothing is furnished. The sick are well cared for. We have accommodations for the insane and idiotic. There are no children to educate. We have no permanent paupers in the poorhouse and consequently pay our keeper no salary, but give him instead the use of the house and $4 per week to take care of those we have. Our pauperism is caused mainly by accidents, hence paupers are kept in the poorhouse only a short time.

*Midland.*—The poorhouse is located in the township of Midland. The house and all out-buildings are in fair condition. The facilities for bathing are well, buckets, and the river on the boundary of the farm. The building is warmed by wood stoves, and poorly ventilated by doors and windows. Treatment of paupers: Moral suasion for government, and work for those who are able. Food is common farm fare—meat, vegetables, bread, butter, and syrup. Have three meals a day at regular hours. The clothing is good; strong woolen for winter and cotton for summer. The sick are attended

by a physician on contract, and have the personal care of the overseer and matron. For the insane and idiotic there are properly furnished cells, and proper inducements are held out to get them to perform light labor. Their general treatment is mild but firm. Children attend district school.

*Missaukee.*—[No poorhouse nor farm].

*Monroe.*—The poorhouse, which is new, is located in the township of Monroe, on the south bank of the river Raisin, four miles above Monroe city. The other buildings are in good condition. The length of house is 184 feet. In front is the keeper's house, 44x54 feet, three stories high with basements. All partitions are built of brick from the foundation. There are two laundries, two dining-rooms, and two bath-rooms in the paupers' department. The drainage to the river is by means of a sewer 18x28 inches, with numerous laterals and traps. The bath-rooms are supplied with warm and cold water. The buildings are warmed by furnaces which are supplied with cold-air flues. The ventilation is by cold-air flues, and there are box window frames with weights. The paupers are treated kindly and humanely, using moral suasion. No corporal punishment is allowed. Food consists of wheat and corn bread, salt pork and beef, soup once a week, fresh meats or fish daily through the winter, and milk at all times. Meals are served three times a day in summer, and twice a day in winter. Clothing for males in summer is cottonade, in winter the same with the addition of cotton flannel underwear; for females, cotton denims and prints in summer and warm under-clothing in winter. The sick have good nursing, and are furnished with such food as is ordered by the attending physician, who is employed by the year, but paid by the visit. For the insane and idiotic there are suitable rooms where for a time they can be locked up and properly cared for. The expense of maintaining the insane at the asylum is paid by the county treasurer, and in no case are the accounts for the same audited by the board of superintendents. All the children who are able attend the public school which is adjacent to the farm.

*Montcalm.*—The poorhouse is located in Fairplain township. The buildings are wooden structures, consisting of three two-story houses connected and forming three sides of a square. They are all in passable condition, warm, comfortable, and as convenient as could be expected from the irregular manner of building. We have added this season a new building, 26x36, for laundry, bath-room, and other purposes. The facilities for bathing will be good when the new bath-room is completed, which will be supplied with bath-tub and warm and cold water. Buildings are warmed by stoves and drums. We find no difficulty in making the inmates comfortable in winter. There is no special plan of ventilation adopted, but there are plenty of doors and windows, and we find no difficulty in getting plenty of fresh air. The inmates are all well treated, and are as contented as this class of persons usually are. One building is occupied by the women, another by the men. The old people occupy the lower halls. Food is plain and substantial and always of good quality. We have a good garden, and keep the tables well supplied with vegetables and fruit. Have fresh meat about once a week. Paupers have comfortable clothing and it is kept clean. The sick are well cared for. We always employ a good physician who visits the house once a week and oftener if necessary. Our keeper appears to be kind and humane, and the sick do not complain of neglect or unkind treatment. The insane that we have are kept in the halls with the other inmates. When our new buildings are completed, we shall have rooms especially designed for their safety and comfort. The idiotic

have the freedom of the lower halls, and it is not found necessary to restrain either of these classes. Children of school age attend the district school and have the same treatment as the other children of the district. The distance to the school-house is less than half a mile.

*Montmorency.*—No poorhouse [nor farm].

*Muskegon.*—The poorhouse is located in the township of Muskegon, two miles from the city of Muskegon. There has been a two-story building, 22x40 feet, erected this year, which is an addition to the one used before. The two buildings afford ample room for thirty paupers. The out-buildings are sufficient for present use. For bathing purposes we use tubs and other domestic utensils. Buildings are warmed by stoves, using wood for fuel, and are ventilated by doors and windows. Paupers are kindly and humanely treated. Their food is good and wholesome—use the vegetables that are grown on the farm. In case of sickness, delicacies are supplied. Clothing is plain, warm, and substantial. The sick are cared for by the keeper and his family, and paupers. A physician is called when needed, who is paid by the year. The insane are kept at the asylum at Kalamazoo. There are two cells in the new building for temporary use. When children are kept temporarily, they are sent to district school one-half mile distant.

*Newaygo.*—The poorhouse is located in the township of Brooks. The house and other buildings are in fair condition, and are comfortable for the purposes designed. Have no special facilities for bathing. Buildings are warmed by wood stoves, and are ventilated by the ordinary method in common dwellings. The treatment is kind and considerate. Paupers are required to labor when able, and are discharged when it is thought best. Food is substantial, and is such as is required by their condition. No pains spared in this respect. The clothing is such as is required, the season and person being considered. The sick are treated by a physician under regular contract, and cared for by the keeper of the house and such help as it is necessary to employ. A cell is provided for the insane, but it is not often used. The idiotic are not of that degree to require special attention or separation only as regards sex. Have had no children of proper age for the public schools, except two whose mental condition made it not advisable to give them any attention in this respect.

*Oakland.*—The poorhouse is located in the township of Waterford within three miles of the geographical centre of the county. It is a large, three-story, brick structure, planned by an amateur, and as a consequence is poorly adapted to the use intended. Twenty-five per cent of its cost properly expended would have built a much more useful building. The barns are sufficient in size and number for the needs of the place, and all fences and buildings are kept in good repair. The facilities for bathing are two bath-rooms, with baths of the usual kind and shower-bath also. Furnaces are used in the poorhouse for heating purposes, and are an effective but expensive mode, their main recommendation being that they are out of the way of the manipulation of the inmates. In this country where it is the rule to use half-seasoned lumber for building, no special arrangement for ventilation is needed. There is high authority as well as experimental proof that "the wind bloweth where it listeth." We give the paupers as good care as possible; indeed, if we did not they would not stay with us as long as they do. Food consists of clean and properly cooked meat, fish, bread, and vegetables, and all that they require of it. Clothing is decent and comfortable. The sick have all that the doctor

orders. The insane are provided with a one-story brick building separate from the main one. The insane and idiotic are treated as if they really possess bodies to be made comfortable, and perhaps souls to be saved. Children are seldom kept in the poorhouse long enough to be sent to school. They are either sent to Coldwater, or eligible places are found for them nearer home.

*Oceana.*—The poorhouse is located in the township of Hart. The buildings are in good condition. Facilities for bathing are tubs and pails. Buildings are warmed wholly by stoves, and ventilated by doors and windows. Paupers are humanely treated and their wants are well looked after. They have good, plain, substantial food; white, graham, and corn bread, beef and pork, both salt and fresh, fruit and vegetables. Clothing is plain and comfortable, but selected with a view to service. We have no separate hospital building, but have a room for the sick. A physician is employed, and the nursing is done by the keeper and inmates. We have only two that are insane, and they are kept separate from the others, although they are harmless. There is a school-house one-half mile away, where children are sent when there are any of right age and capacity to attend school and receive instruction. We bind them out as soon as we can.

*Ogemaw.*—No poorhouse [nor farm].

*Ontonagon.*—The poorhouse is situated in the township of Ontonagon. It is in good condition, and the out-buildings are in good repair. There are between 80 and 90 acres cleared and fenced. Only the ordinary facilities for bathing. Building is warmed by wood stoves, and ventilated by doors and windows. There are at present no paupers in the poorhouse. The food is good and wholesome, and the clothing is warm and comfortable. The care of the sick is first-class. No accommodations for the insane and idiotic. When there are any children, they are sent to district school. The farm has been rented from the first of May last for $150 per annum, and the paupers have been taken care of outside of the county-house.

*Osceola.*—The poorhouse is located in the township of Sylvan. The condition is good. Have no bath-room. Building is warmed by wood stoves, and but poorly ventilated. The treatment of the paupers, their food, clothing, and the care of the sick are good. No accommodations for insane and idiotic. Have no facilities for the education of the children. They are at the mercy of the district school.

*Oscoda.*—No poorhouse nor farm.

*Otsego.*—[No poorhouse nor farm.]

*Ottawa.*—The poorhouse is located in the township of Polkton. It is an old wood building in ordinary state of repair. The barns, sheds, and out-buildings are all of wood and in good repair. For bathing purposes we use tubs and other domestic utensils. Water is pumped by wind-mill to supply the house and barn. A supply of ice for all purposes is put up every year. Buildings are warmed by furnace and stoves, with wood for fuel. No special mode of ventilation. Paupers are treated humanely and with due regard to their condition as members of the human family. Corporal punishment is not entirely prohibited, but is rarely resorted to. Food consists of wheat and corn bread, mush, pork, beef, mutton, butter, milk, and of all the farm vegetables, viz.: Potatoes, turnips, onions, beets, carrots, parsnips, cabbage, and beans. Tea is served twice a day—at breakfast and supper. Tobacco is provided for all inmates who were addicted to its use before going to the poorhouse. Sugar, molasses, and all groceries are used as at ordinary farm-houses.

Clothing is coarse, but warm and comfortable in winter—light and cool in summer. Part of it is made at the poorhouse, but the most of it is purchased ready-made. The sick receive the same care as in well regulated farm-houses. Nurses are provided especially as such when necessary. A physician is employed at a stipulated price per visit, which includes all ordinary medicines. He resides within one-half mile of the poorhouse, and ordinarily visits the patients only when called. For the insane and idiotic there are well ventilated and lighted rooms in the second story, and they are confined in no other way than by locking the doors of their rooms. In fine weather and high temperature they are given their freedom in the open air in a high-fenced yard. They are very kindly treated in every way. Sometimes in the wild ravings of the extremest insanity, close confinement in cells for that purpose becomes necessary, and is resorted to. Children are kept here only at intervals, and for a short time. Homes are found for them as soon as possible. The salary of the keeper includes the pay of all help employed inside the poorhuse, except special nurse.

*Presque Isle.*—No poorhouse [nor farm].

*Roscommon.*—No poorhouse nor farm.

*Saginaw.*—The poorhouse is located in the township of Saginaw. The general condition of the buildings is good. We have a room for bathing purposes, and all new-comers, when it is thought necessary, are required to bathe and are furnished clean clothes. The rooms are warmed by stoves, and ventilated by windows, and ventilators in chimneys. Paupers are kindly treated, no punishment being allowed except confinement on short rations. Food consists of salt and fresh meat, fish, vegetables, tea, coffee, milk, and syrup. Meals are served three times each day except Sunday. The clothing furnished is good and comfortable, adapted to the season and the pauper. The sick are well attended,—the county physician visits the poorhouse as often as he thinks necessary. We have a substantial brick building for the detention of the demented, and when it is necessary we lock them up, especially during the night. During the day they roam about the premises. When there are children here we send them to the district school.

*Sanilac.*—The poorhouse is located in the township of Lexington. It is built of brick and is in very good condition. Have no facilities for bathing except tubs and wash-dishes. The buildings are warmed by stoves using wood for fuel. The ventilation is by doors and windows, there being a window in every room. Paupers are always kindly treated. They have three meals a day, consisting principally of the production of the farm, viz.: wheat bread, potatoes, vegetables, pork, beef, milk, butter, fruit; also sugar, tea, etc. Meals are prepared in the ordinary way. Clothing is comfortable, suited to the season, woolen being furnished in winter and cotton in summer. The sick are tenderly and humanely cared for. We have rooms where the insane and idiotic may be confined when necessary. We have no children in the poorhouse at present, and never have except for a few days at a time. We have a farm of 120 acres, a little over 100 acres of which are improved.

*Schoolcraft.*—[No poorhouse nor farm.]

*Shiawassee.*—The poorhouse is located in the township of Caledonia. The condition of buildings is good. Have a good bath-tub and other necessary arrangements for bathing. Buildings are warmed by stoves using wood for fuel. Ventilation is by doors and windows. Treatment of paupers is good, and the food is excellent. Clothing is good and comfortable. The sick have

good care and nursing. We have no extra accommodations for the insane and idiotic—they mingle with the other inmates except when it is necessary to confine them. Children attend a good primary school near by.

*St. Clair.*—The poorhouse is located in the township of Wales. Poorhouse and other buildings are in good condition. For bathing we use bath-tubs and other vessels. Buildings are warmed by two furnaces in the hall on the lower floor, and by stoves in different rooms. Wood is used for fuel. Ventilation is by means of ventilators in the walls, and by windows. Treatment of paupers is kind and good. Food consists of pork, beef, and other meats, fresh and salt, vegetables of different kinds, bread, mush, milk, butter, coffee, tea, etc. Clothing is of good common quality and comfortable, adapted to the season and person. The sick are attended by a competent physician and are as kindly cared for as the case requires. There are rooms where the insane and idiotic may be confined and comfortably kept when necessary. They are treated kindly. Children of proper age who are capable of learning are sent to district school.

*St. Joseph.*—The poorhouse is located in the township of Fawn River. The house is an old one, but in good repair. Have one room set apart for bathing purposes, and inmates on arrival are required to bathe. All are required to keep themselves in a cleanly condition. Buildings are warmed by stoves. There is no ventilation save by doors and windows. Paupers are treated kindly, and all that are able are required to labor. Food is good and wholesome, and furnished in abundance. Clothing is made in the house, from substantial goods. The sick are kindly cared for, a physician being employed by the year. Have no accommodations for the insane and idiotic. Children are sent to the State Public School.

*Tuscola.*—The poorhouse is located in the township of Almer, about one mile from the county seat. The condition of buildings is good. The facilities for bathing are a bath-tub. Buildings are warmed by wood stoves, and ventilated by doors and windows. The treatment of paupers is kind and gentle. Food consists of meat, potatoes, milk, white and graham flour, and plenty of vegetables. Clothing is cotton in summer and woolen in winter. The sick are under the care of the keeper and his wife, and whenever they think necessary the county physician is called. The accommodations for the insane are very poor indeed. When we have any that are violent and cannot be quieted, we have a cell where they are confined. The treatment is always kind. We never allow any to be roughly or unkindly treated. Children attend the common district school.

*Van Buren.*—The poorhouse is located in the township of Hartford. It is a wood building in good repair. Have no facilities for bathing. Building is warmed by wood stoves, and ventilated by register through floor and ceiling of second story. Paupers are treated kindly. Food: Beef, pork, and vegetables. Clothing: Cotton and woolen. The sick are properly nursed, and are attended by a physician who is employed by the year. The insane are taken to the asylum, and we hire the idiotic kept in a private family. For the education of the children there is a school-house on the corner of the poor-farm.

*Washtenaw.*—The poorhouse is located in the township of Pittsfield. The house and buildings are in good repair and are as well adapted to the various uses as can be expected from buildings erected at different times without any regular design. Have ample facilities for bathing, and care is taken that all who are able avail themselves of them. Others are cared for by the nurses.

The heating of the building is mostly by coal stoves and furnaces, but little wood being used for this purpose. The whole building is made warm and comfortable. In the part of the building warmed by furnaces the Ruttan system of ventilation is used. In other parts ventilation is effected by doors and windows. Mild treatment is required of keeper and assistants, and no other is allowed in any case. Food consists of beef, pork, mutton, salt and fresh fish, with bread, mush, potatoes, turnips, cabbage, tomatoes, beans, and soups so alternated as to make a wholesome and agreeable diet. Tea and coffee are also supplied. Clothing is plain and comfortable, and suitable under-clothing is provided for all seasons. We have a hospital for the sick, with the steward always in attendance. The county physician makes visits weekly, and oftener if needed. All the sick and infirm are cared for as fully as in any similar institution. We have no insane. There are a few idiotic and they are properly cared for. We aim to keep no children in the institution, and, except for a few weeks, have had none for several years that could be taught. Those who cannot be put into good families here are sent to the State Public School at Coldwater.

*Wayne.*—The poorhouse is located in the township of Nankin, on the M. C. R. R., fifteen miles from Detroit. The poorhouse is in fair condition. The insane asylum, which is a separate institution, is very well adapted to the purposes intended, and is in good condition, but is entirely too small for the number of persons to be provided for. There are bath-rooms and bath-tubs, and hot and cold water are provided for each department at both houses. The warming of the building is entirely by stoves, and the ventilation by doors and windows principally. Abuse or ill-treatment of the insane or paupers is not tolerated under any circumstances. Food consists of bread, beef, pork, and vegetables, with tea or coffee, served in good shape. Occasionally extras are provided. For the men that are here permanently, outside clothing is purchased ready-made; everything else, except shoes and hose, is manufactured here, and principally by the inmates. The sick are attended daily, and oftener when necessary, by the resident physician. His orders as to diet and care, are strictly followed. The idiotic males have a room and yard separate from the rest of the inmates, and are quite well cared for; the females are in the general wards. School is taught by a qualified teacher about seven months each year, and children that can learn are required to attend. All are sent to the State Public School that can be admitted.

*Wexford.*—We have not used the poor-farm the last year. We rented it for one-third the produce. The board of supervisors at their late session in October sold it. At present we have no poor-farm. Furnish mostly temporary relief in any way most advisable at the time required. We have but two permanent paupers, and get them boarded by the week at the cheapest place where they will furnish proper food and treatment.

## SCHEDULE B.

*Names of Superintendents of the Poor as signed officially to their reports.*

*Alcona*—Geo. H. Blush, William Shepard, David Mulholland.
*Allegan*—C. W. Calkins, S. S. Dryden, Oka Town.
*Alpena*—Fred. S. Goodrich, David S. McNeill, Hiram J. Eaton.
*Antrim*—Jas. Williams, G. W. Montgomery.
*Baraga*—John Q. Barnard, Jno. Q. McKernon, W. H. Hendrick.
*Barry*—L. E. Stauffer, P. Burton, Jno. M. Nevins.
*Bay*—Robert Leng, Geo. E. Fish. Willard E. Waldron.
*Benzie*—P. A. Smith, Lysander Kenney, Henry Woodward.
*Berrien*—David E. Hinman, B. F. Rounds, Thomas C. Bradley.
*Branch*—Francis D. Ransom, J. Clark Pierce.
*Calhoun*—T. W. Hall, A. O. Hyde, Thomas Holmes.
*Cass*—G. S. Wilbur, Jas. H. Farnum, A. Garwood.
*Charlevoix*—Wm. Black, H. P. Myers, W. C. Newman.
*Cheboygan*—G. P. Langdon, Thomas Richardson.
*Chippewa*—Augustin Gager, Charles R. Saville.
*Clare*—A. W. McIntyre, E. B. Evans, J. D. Newth.
*Clinton*—James Kipp, Warner Bunday, Robert Young.
*Crawford*—J. M. Jones, Daniel S. Waldron, Mark S. Dilley.
*Delta*—Emil Glaser, John N. Hiller, Curtis J. Bellows.
*Eaton*—G. P. Rand, C. A. Merritt.
*Emmet*—Carlos D. Hampton, G. W. Bump, A. T. Burnett.
*Genesee*—R. W. Dullam, L. J. Hitchcock, S. R. Atherton.
*Gladwin*—W. Grout, J. K. McFarlane, James M. Shepherd.
*Grand Traverse*—J. G. Ramsdell.
*Gratiot*—P. R. Phillips, Wm. Marlow, John Shelt.
*Hillsdale*—John W. Falley, Bani Bishop, Lewis Wales.
*Houghton*—Phil. Scheuermann, William Miller.
*Huron*—M. Hanselman, Francis Thompson, Wm. Carter.
*Ingham*—L. B. Potter, Milton Ryan, J. S. Crosman.
*Ionia*—B. H. Preston, S. A. Yeomans.
*Iosco*—Geo. H. Keating, Clark Esmond, A. G. Van Wey.
*Isabella*—Jerome Bachelder, C. M. Forbes, Chas. T. Russell.
*Jackson*—H. S. Smith, C. S. Anderson, F. A. Kennedy.
*Kalamazoo*—H. W. Bush, O. F. Burroughs.
*Kalkaska*—James Greacen, John G. West.
*Kent*—W. L. Coffinberry, S. M. Pearsall, Reuben H. Smith.
*Keweenaw*—C. J. Woolway, W. H. Solis, A. I. Lawbaugh.
*Lake*—John Ballinger, Chas. K. Radcliffe.
*Lapeer*—L. Calkins, H. S. Castle, Geo. E. Scott.
*Leelanaw*—William Voice, Ralph Pybus, George Mason.
*Lenawee*—H. S. Russell, H. P. Combs, H. C. Conkling.
*Livingston*—A. W. Messenger, Albert Riddle, Lyman Judson.
*Mackinac*—John Hoban, Dominick Murray, Michael Marley.

*Macomb*—C. P. Hooker, H. D. Crittenden, H. Fries.
*Manistee*—C. D. Gardner, William Crosby.
*Marquette*—H. E. Warner, Edward C. Anthony, Edwin Sterne.
*Mason*—D. C. Pelton, B. F. Bidwell, Geo. W. Clayton.
*Mecosta*—J. Frank Clark, John T. Cook, Lewis Carman.
*Menominee*—Edward L. Parmenter, Hugh McLaughlin, Henry Nason.
*Midland*—J. C. Townsend, Harvey Lyon, L. F. Smith.
*Missaukee*—James Nixon, James Cavanagh.
*Monroe*—Isaac Lewis, John Davis, Addison E. Dunbar.
*Montcalm*—I. P. Shoemaker, R. C. Miller, Alfred Stone.
*Muskegon*—G. F. Outhwaite, Lafayette Knowles, A. P. Horton.
*Newaygo*—William Rice, Henry J. Orton.
*Oakland*—A. W. Hovey, W. M. McConnell, J. W. Leonard.
*Oceana*—William J. Sprigg, Caleb Davis, Charles McClave.
*Ogemaw*—John Randall, D. M. Caldwell.
*Ontonagon*—John G. Parker, James E. Hoyt, John Chynoweth.
*Osceola*—B. G. Moulton, B. B. Chadwick, J. H. Lanphear.
*Otsego*—Henry Trumley, Walter Bell, Adam Assal.
*Ottawa*—Wm. J. Scott, John Wagner, Wm. N. Angell.
*Presque Isle*—John McArthur.
*Roscommon*—W. S. Washington.
*Saginaw*—Geo. P. Butler, Thos. L. Jackson, Frank McMann.
*Sanilac*—R. J. Arnot, N. Cameron, T. Nicol.
*Schoolcraft*—A. Boogren.
*Shiawassee*—Cortes Pond, J. A. Chapin, A. B. Chipman.
*St. Clair*—Uriah Hayden, Arnold Saph, Robert Bailie.
*St. Joseph*—D. M. Bateman, E. Flanders, J. F. Van DeVanter.
*Tuscola*—James D. Sutton, J. R. Hooper, Daniel N. Blocher.
*Van Buren*—H. M. Olney, W. W. Hodge, S. W. Duncombe.
*Washtenaw*—Dan'l B. Greene, L. Davis.
*Wayne*—J. C. McDonald, Michael Dunn.
*Wexford*—G. S. Sloat, H. I. Devoe, H. N. Green.

NINTH ANNUAL ABSTRACT

OF

# STATISTICAL INFORMATION

RELATIVE TO THE

# INSANE, DEAF AND DUMB, AND BLIND,

ALSO STATISTICS OF THE

# IDIOTIC AND EPILEPTIC,

IN THE

# STATE OF MICHIGAN,

1881.

BY AUTHORITY.

LANSING:
W. S. GEORGE & CO., STATE PRINTERS AND BINDERS.
1882.

# ABSTRACT.

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AND

## EXHIBIT A.

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**Exhibit A**—STATISTICS OF PERSONS REPORTED FROM THE SAME FAMILIES.

DEPARTMENT OF STATE,
*Lansing, July 21, 1882.*

HON. DAVID H. JEROME, *Governor of the State of Michigan:*

SIR,—In compliance with law I submit herewith the Ninth Annual Abstract of Statistical Information relative to the Insane, Deaf and Dumb, and Blind, also like information concerning the Epileptic and Idiotic, in the State at the time the assessment was taken for the year 1881.

Very respectfully,

WILLIAM JENNEY,

*Secretary of State.*

## TABLE I.

*Showing, for the State and Counties, by Sex, the Number of Insane Persons in Michigan, to insanity, and how they are*

| Number. | State, Counties, and Asylums. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | State[1] | Totals | 1716 | 1683 | 16 | 11 | 4 | 2 | 731 | 752 | 184 | 28 | 21 |
| | | Males | 788 | 772 | 9 | 5 | 2 | ---- | 446 | 274 | 47 | 8 | 13 |
| | | Females | 928 | 911 | 7 | 6 | 2 | 2 | 285 | 478 | 137 | 20 | 8 |
| 2 | Allegan | Males | 8 | 8 | ---- | ---- | ---- | ---- | 7 | 1 | ---- | ---- | ---- |
| | | Females | 10 | 10 | ---- | ---- | ---- | ---- | 1 | 6 | 3 | ---- | ---- |
| 3 | Barry | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| 4 | Bay | Males | 5 | 3 | ---- | ---- | 2 | ---- | 4 | 1 | ---- | ---- | ---- |
| | | Females | 4 | 3 | ---- | ---- | 1 | ---- | 1 | 3 | ---- | ---- | ---- |
| 5 | Berrien | Males | 2 | 2 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 |
| | | Females | 6 | 5 | ---- | 1 | ---- | ---- | ---- | 5 | 1 | ---- | ---- |
| 6 | Branch | Males | 4 | 4 | ---- | ---- | ---- | ---- | 3 | 1 | ---- | ---- | ---- |
| | | Females | 6 | 6 | ---- | ---- | ---- | ---- | 2 | 3 | 1 | ---- | ---- |
| 7 | Calhoun | Males | 7 | 7 | ---- | ---- | ---- | ---- | 5 | 1 | 1 | ---- | ---- |
| | | Females | 13 | 13 | ---- | ---- | ---- | ---- | 7 | 2 | 4 | ---- | ---- |
| 8 | Cass | Males | 6 | 6 | ---- | ---- | ---- | ---- | 3 | 2 | 1 | ---- | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 5 | 2 | ---- | ---- | ---- |
| 9 | Cheboygan | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| 10 | Chippewa | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| 11 | Clare | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| 12 | Clinton | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | 6 | 6 | ---- | ---- | ---- | ---- | 1 | 5 | ---- | ---- | ---- |
| 13 | Eaton | Males | 5 | 5 | ---- | ---- | ---- | ---- | 2 | 1 | 1 | ---- | 1 |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| 14 | Emmet | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| 15 | Genesee | Males | 8 | 8 | ---- | ---- | ---- | ---- | 5 | 2 | 1 | ---- | ---- |
| | | Females | 11 | 11 | ---- | ---- | ---- | ---- | 4 | 6 | 1 | ---- | ---- |

[1] Exclusive of inmates of Michigan Retreat, located in Wayne County, from which no report has been received. There were 12 males and 28 females reported from this institution in 1880.

## TABLE I.

*their Color, Conjugal Condition and Health, and Mental Condition and Habits previous Supported, for the year 1881.*

| Mental Condition Previous to Insanity. | | | | Health. | | | | Habits Previous to Insanity. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Unformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| 755 | 47 | 57 | 857 | 1181 | 343 | 169 | 23 | 468 | 67 | 16 | 7 | 1158 | 335 | 7 | 1367 | 7 | |
| 477 | 28 | 24 | 259 | 575 | 146 | 58 | 9 | 192 | 35 | 9 | 2 | 550 | 124 | 4 | 657 | 3 | 1 |
| 278 | 19 | 33 | 598 | 606 | 197 | 111 | 14 | 276 | 32 | 7 | 5 | 608 | 211 | 3 | 710 | 4 | |
| 4 | 1 | 1 | 2 | 7 | 1 | ---- | ---- | 7 | 1 | ---- | ---- | ---- | 5 | ---- | 3 | ---- | 2 |
| 9 | ---- | 1 | ---- | 5 | 5 | ---- | ---- | 7 | 1 | 1 | 1 | ---- | 2 | ---- | 8 | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 3 |
| 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 1 | 1 | 1 | 2 | 5 | ---- | ---- | ---- | 3 | 1 | ---- | ---- | 1 | 3 | ---- | 1 | 1 | 4 |
| 2 | ---- | 1 | 1 | 3 | 1 | ---- | ---- | 2 | 2 | ---- | ---- | ---- | 1 | ---- | 2 | 1 | |
| 1 | ---- | ---- | 1 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | ---- | 1 | ---- | ---- | 2 | ---- | 5 |
| 4 | 1 | 1 | ---- | 4 | 1 | ---- | 1 | 4 | 1 | ---- | ---- | 1 | 1 | 1 | 4 | ---- | |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 2 | 2 | ---- | ---- | ---- | 3 | ---- | 1 | ---- | 6 |
| 5 | ---- | ---- | 1 | 5 | 1 | ---- | ---- | 3 | 3 | ---- | ---- | ---- | 3 | ---- | 3 | ---- | |
| 2 | 1 | 1 | 3 | 4 | 1 | 2 | ---- | 4 | 1 | 1 | ---- | 1 | 1 | 1 | 5 | ---- | 7 |
| 8 | ---- | 1 | 4 | 8 | ---- | 4 | 1 | 10 | 2 | 1 | ---- | ---- | 5 | ---- | 8 | ---- | |
| 5 | ---- | ---- | 1 | 6 | ---- | ---- | ---- | 4 | 1 | ---- | ---- | 1 | 1 | 1 | 4 | ---- | 8 |
| 5 | 1 | 1 | ---- | 7 | ---- | ---- | ---- | 5 | 1 | ---- | 1 | ---- | 1 | ---- | 6 | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 10 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 11 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 12 |
| 5 | ---- | ---- | 1 | 2 | 1 | 3 | ---- | 6 | ---- | ---- | ---- | ---- | 5 | ---- | 1 | ---- | |
| 2 | 1 | ---- | 2 | 3 | ---- | ---- | 2 | 5 | ---- | ---- | ---- | ---- | 2 | ---- | 3 | ---- | 13 |
| 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 |
| ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 7 | ---- | ---- | 1 | 7 | ---- | 1 | ---- | 7 | 1 | ---- | ---- | ---- | 3 | 1 | 4 | ---- | 15 |
| 8 | 1 | 2 | ---- | 6 | 4 | 1 | ---- | 9 | 1 | ---- | ---- | 1 | 7 | ---- | 4 | ---- | |

TABLE I.—CONTINUED.

| Number. | Counties and Asylums. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Gladwin | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- |
| 2 | Grand Traverse | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| 3 | Gratiot | Males | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| | | Females | 3 | 2 | ---- | 1 | ---- | ---- | ---- | 1 | 1 | 1 | ---- |
| 4 | Hillsdale | Males | 10 | 10 | ---- | ---- | ---- | ---- | 3 | 5 | 2 | ---- | ---- |
| | | Females | 17 | 17 | ---- | ---- | ---- | ---- | 8 | 6 | 1 | 2 | ---- |
| 5 | Huron | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| 6 | Ingham | Males | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| | | Females | 6 | 6 | ---- | ---- | ---- | ---- | ---- | 4 | 1 | ---- | 1 |
| 7 | Ionia | Males | 5 | 5 | ---- | ---- | ---- | ---- | 2 | 3 | ---- | ---- | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 2 | 4 | ---- | 1 | ---- |
| 8 | Isabella | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 |
| 9 | Jackson | Males | 16 | 13 | 2 | 1 | ---- | ---- | 10 | 3 | ---- | ---- | 3 |
| | | Females | 13 | 13 | ---- | ---- | ---- | ---- | 2 | 2 | 6 | ---- | 3 |
| 10 | Kalamazoo[1] | Males | 7 | 7 | ---- | ---- | ---- | ---- | 4 | 2 | 1 | ---- | ---- |
| | | Females | 10 | 9 | 1 | ---- | ---- | ---- | 2 | 4 | 3 | 1 | ---- |
| 11 | Kent | Males | 9 | 9 | ---- | ---- | ---- | ---- | 4 | 3 | ---- | 2 | ---- |
| | | Females | 12 | 12 | ---- | ---- | ---- | ---- | 2 | 1 | 6 | 3 | ---- |
| 12 | Keweenaw | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| 13 | Lapeer | Males | 4 | 4 | ---- | ---- | ---- | ---- | 1 | 2 | 1 | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| 14 | Lenawee | Males | 8 | 6 | 2 | ---- | ---- | ---- | 4 | 4 | ---- | ---- | ---- |
| | | Females | 17 | 16 | ---- | ---- | ---- | 1 | 4 | 11 | 2 | ---- | ---- |
| 15 | Livingston | Males | 2 | 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| 16 | Macomb | Males | 6 | 6 | ---- | ---- | ---- | ---- | 2 | 2 | 2 | ---- | ---- |
| | | Females | 10 | 10 | ---- | ---- | ---- | ---- | 7 | 3 | ---- | ---- | ---- |
| 17 | Manistee | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 18 | Marquette | Males | 3 | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |

[1] Exclusive of insane in the Michigan Asylum. See "Michigan Asylum for Insane" near the end of this table.

TABLE I.—CONTINUED.

| Mental Condition Previous to Insanity. | | | | Health. | | | | Habits Previous to Insanity. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uniformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 |
| 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 2 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 3 |
| 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 2 | ---- | 1 | ---- | |
| 3 | ---- | 7 | ---- | 7 | ---- | 3 | ---- | 5 | ---- | 5 | ---- | ---- | 1 | ---- | 9 | ---- | 4 |
| 8 | ---- | 9 | ---- | 11 | 5 | 1 | ---- | 13 | ---- | 1 | 2 | 1 | 5 | ---- | 12 | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 5 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | 2 | ---- | 6 |
| 4 | ---- | ---- | 2 | 2 | 1 | 1 | 2 | 3 | ---- | ---- | ---- | 3 | 3 | ---- | 3 | ---- | |
| 4 | 1 | ---- | ---- | 3 | 1 | ---- | 1 | 4 | 1 | ---- | ---- | ---- | 2 | ---- | 3 | ---- | 7 |
| 7 | ---- | ---- | ---- | 5 | 2 | ---- | ---- | 6 | ---- | ---- | ---- | 1 | 4 | ---- | 3 | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 8 |
| 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| 10 | ---- | ---- | 6 | 10 | 2 | 3 | 1 | 14 | 1 | 1 | ---- | ---- | 1 | ---- | 15 | ---- | 9 |
| 10 | ---- | ---- | 3 | 4 | 5 | 2 | 2 | 9 | ---- | 2 | 1 | 1 | 6 | ---- | 6 | 1 | |
| 4 | 1 | 1 | 1 | 3 | 2 | 2 | ---- | 5 | 1 | 1 | ---- | ---- | 3 | ---- | 4 | ---- | 10 |
| 8 | ---- | ---- | 2 | 1 | 7 | 2 | ---- | 10 | ---- | ---- | ---- | ---- | 5 | ---- | 5 | ---- | |
| 6 | 1 | 1 | 1 | 8 | ---- | 1 | ---- | 8 | ---- | ---- | ---- | 1 | 3 | ---- | 6 | ---- | 11 |
| 12 | ---- | ---- | ---- | 10 | 2 | ---- | ---- | 11 | 1 | ---- | ---- | ---- | 3 | 1 | 8 | ---- | |
| ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 12 |
| 1 | ---- | 1 | ---- | ---- | ---- | 1 | 1 | 1 | ---- | 1 | ---- | ---- | 2 | ---- | ---- | ---- | |
| 3 | ---- | ---- | 1 | 1 | 1 | 2 | ---- | 3 | 1 | ---- | ---- | ---- | 3 | ---- | 1 | ---- | 13 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| 4 | 1 | 2 | 1 | 7 | 1 | ---- | ---- | 6 | 2 | ---- | ---- | ---- | 3 | ---- | 5 | ---- | 14 |
| 15 | ---- | ---- | 2 | 13 | 2 | ---- | ---- | 9 | 2 | ---- | ---- | 6 | 11 | ---- | 6 | ---- | |
| 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 15 |
| 1 | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- | |
| 3 | ---- | 2 | 1 | 3 | 1 | 2 | ---- | 4 | 2 | ---- | ---- | ---- | 5 | ---- | 1 | ---- | 16 |
| 5 | 1 | 1 | 3 | 4 | 5 | 1 | ---- | 4 | 5 | ---- | ---- | 1 | 5 | ---- | 5 | ---- | |
| ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 17 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| ---- | 1 | ---- | 2 | 2 | 1 | ---- | ---- | ---- | 1 | ---- | 1 | 1 | 1 | ---- | 1 | 1 | 18 |
| ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |

TABLE I.—CONTINUED.

| Number. | Counties and Asylums. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Mason | Males | | | | | | | | | | | |
| | | Females | 3 | 3 | | | | | 1 | 2 | | | |
| 2 | Mecosta | Males | 2 | 2 | | | | | | 2 | | | |
| | | Females | 4 | 4 | | | | | 1 | 3 | | | |
| 3 | Midland | Males | 1 | 1 | | | | | | 1 | | | |
| | | Females | 2 | 2 | | | | | 1 | 1 | | | |
| 4 | Monroe | Males | 5 | 5 | | | | | 3 | 1 | 1 | | |
| | | Females | 8 | 8 | | | | | 4 | 3 | 1 | | |
| 5 | Montcalm | Males | 1 | 1 | | | | | | 1 | | | |
| | | Females | 5 | 5 | | | | | 1 | 3 | 1 | | |
| 6 | Muskegon | Males | | | | | | | | | | | |
| | | Females | 1 | 1 | | | | | | | 1 | | |
| 7 | Newaygo | Males | 1 | 1 | | | | | 1 | | | | |
| | | Females | | | | | | | | | | | |
| 8 | Oakland[1] | Males | 2 | 2 | | | | | 1 | | 1 | | |
| | | Females | 9 | 9 | | | | | 3 | 3 | 2 | 1 | |
| 9 | Oceana | Males | | | | | | | | | | | |
| | | Females | 2 | 1 | | | 1 | | 1 | | 1 | | |
| 10 | Ontonagon | Males | 1 | 1 | | | | | 1 | | | | |
| | | Females | 1 | 1 | | | | | | 1 | | | |
| 11 | Osceola | Males | | | | | | | | | | | |
| | | Females | 1 | 1 | | | | | | 1 | | | |
| 12 | Ottawa | Males | 8 | 8 | | | | | 5 | 3 | | | |
| | | Females | 6 | 6 | | | | | 1 | 2 | 1 | 2 | |
| 13 | Saginaw | Males | 6 | 6 | | | | | 3 | 2 | 1 | | |
| | | Females | 7 | 7 | | | | | 2 | 3 | 2 | | |
| 14 | Sanilac | Males | 1 | 1 | | | | | 1 | | | | |
| | | Females | 1 | 1 | | | | | | | 1 | | |
| 15 | Shiawassee | Males | 2 | 2 | | | | | 1 | 1 | | | |
| | | Females | 6 | 6 | | | | | 4 | 2 | | | |
| 16 | St. Clair | Males | 6 | 6 | | | | | 2 | 4 | | | |
| | | Females | 5 | 4 | | | | 1 | 2 | 3 | | | |
| 17 | St. Joseph | Males | 2 | 2 | | | | | 2 | | | | |
| | | Females | 3 | 3 | | | | | | 1 | 1 | 1 | |
| 18 | Tuscola | Males | 6 | 6 | | | | | 4 | | 2 | | |
| | | Females | 5 | 5 | | | | | 3 | | | 2 | |

[1] Exclusive of insane in Eastern Asylum. See "Eastern Michigan Asylum," near the end of this table.

TABLE I.—CONTINUED.

| Mental Condition Previous to Insanity. | | | | Health. | | | | Habits Previous to Insanity. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uninformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 2 | 1 | ---- | ---- | ---- | 1 | 2 | ---- | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 1 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | 1 | ---- | 1 | ---- | |
| 2 | ---- | ---- | 2 | 2 | 1 | 1 | ---- | 4 | ---- | ---- | ---- | ---- | 3 | ---- | 1 | ---- | 2 |
| ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | 3 |
| 3 | ---- | 2 | ---- | 5 | ---- | ---- | ---- | 5 | ---- | ---- | ---- | ---- | 2 | ---- | 3 | ---- | |
| 5 | ---- | 2 | 1 | 5 | 2 | ---- | 1 | 8 | ---- | ---- | ---- | ---- | 6 | ---- | 2 | ---- | 4 |
| ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| 3 | ---- | 2 | ---- | 2 | 3 | ---- | ---- | 4 | ---- | ---- | ---- | 1 | 4 | ---- | 1 | ---- | 5 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 6 |
| ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 |
| 1 | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 6 | ---- | 3 | ---- | 7 | 1 | ---- | 1 | 8 | ---- | 1 | ---- | ---- | 9 | ---- | ---- | ---- | 8 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 1 | 1 | ---- | ---- | 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | 9 |
| ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 10 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 11 |
| 8 | ---- | ---- | ---- | 8 | ---- | ---- | ---- | 6 | 2 | ---- | ---- | ---- | 2 | ---- | 6 | ---- | |
| 4 | 1 | 1 | ---- | 3 | 2 | 1 | ---- | 5 | 1 | ---- | ---- | ---- | 1 | ---- | 5 | ---- | 12 |
| 5 | ---- | ---- | 1 | 6 | ---- | ---- | ---- | 6 | ---- | ---- | ---- | ---- | 6 | ---- | ---- | ---- | |
| 6 | ---- | ---- | 1 | 4 | 2 | ---- | 1 | 5 | 1 | ---- | ---- | 1 | 6 | ---- | 1 | ---- | 13 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 14 |
| 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | |
| 3 | 1 | ---- | 2 | 5 | ---- | 1 | ---- | 2 | 4 | ---- | ---- | ---- | 2 | ---- | 4 | ---- | 15 |
| 6 | ---- | ---- | ---- | 3 | 2 | ---- | 1 | 3 | 2 | ---- | ---- | 1 | 3 | ---- | 3 | ---- | |
| 3 | 1 | 1 | ---- | 2 | 3 | ---- | ---- | 3 | 1 | ---- | ---- | 1 | 3 | ---- | 2 | ---- | 16 |
| ---- | 1 | ---- | 1 | 1 | 1 | ---- | ---- | 1 | ---- | ---- | 1 | ---- | 1 | ---- | ---- | 1 | |
| 3 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 2 | ---- | 1 | ---- | 17 |
| 3 | ---- | ---- | 3 | 5 | 1 | ---- | ---- | 2 | 3 | ---- | ---- | 1 | 3 | ---- | 3 | ---- | |
| 4 | ---- | ---- | 1 | 4 | 1 | ---- | ---- | 5 | ---- | ---- | ---- | ---- | 3 | ---- | 1 | 1 | 18 |

TABLE I.—CONTINUED.

| Number. | Counties and Asylums. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Van Buren | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| 2 | Washtenaw | Males | 4 | 4 | ---- | ---- | ---- | ---- | 2 | 2 | ---- | ---- | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 5 | 2 | ---- | ---- | ---- |
| 3 | Wayne[1] | Males | 95 | 89 | 2 | 4 | ---- | ---- | 59 | 24 | 9 | ---- | 3 |
| | | Females | 103 | 96 | 4 | 3 | ---- | ---- | 45 | 28 | 26 | 1 | 3 |
| 4 | Wexford | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| 5 | Michigan Asylum for Insane | Males | 295 | 295 | ---- | ---- | ---- | ---- | 164 | 109 | 12 | 5 | 5 |
| | | Females | 346 | 344 | 1 | 1 | ---- | ---- | 96 | 201 | 46 | 3 | ---- |
| 6 | Eastern Michigan Asylum | Males | 225 | 222 | 3 | ---- | ---- | ---- | 126 | 87 | 11 | 1 | ---- |
| | | Females | 224 | 223 | 1 | ---- | ---- | ---- | 63 | 139 | 20 | 2 | ---- |

[1] Exclusive of inmates of Michigan Retreat, from which no report has been received.

TABLE I.—CONTINUED.

| Mental Condition Previous to Insanity. | | | | Health. | | | | Habits Previous to Insanity. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uninformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | NUMBER. |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 |
| ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 4 | ---- | ---- | ---- | 3 | 1 | ---- | ---- | 4 | ---- | ---- | ---- | ---- | 3 | ---- | 1 | ---- | 2 |
| 6 | ---- | 1 | ---- | 5 | 1 | 1 | ---- | 7 | ---- | ---- | ---- | ---- | 7 | ---- | ---- | ---- | |
| 81 | 13 | 1 | ---- | 89 | 4 | 2 | ---- | 68 | 9 | ---- | ---- | 18 | 4 | 1 | 90 | ---- | 3 |
| 91 | 9 | 1 | 2 | 98 | 3 | ---- | 2 | 79 | 6 | ---- | ---- | 18 | 7 | ---- | 95 | 1 | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 4 |
| 1 | ---- | 1 | ---- | 1 | ---- | 1 | ---- | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | |
| 294 | 1 | ---- | ---- | 216 | 40 | 39 | ---- | --- | ---- | ---- | ---- | 295 | 37 | ---- | 258 | ---- | 5 |
| ---- | ---- | ---- | 346 | 232 | 29 | 85 | ---- | ---- | ---- | ---- | ---- | 346 | 43 | ---- | 303 | ---- | |
| ---- | ---- | ---- | 225 | 140 | 85 | ---- | ---- | ---- | ---- | ---- | ---- | 225 | 12 | ---- | 213 | ---- | 6 |
| ---- | ---- | ---- | 224 | 125 | 99 | ---- | ---- | ---- | ---- | ---- | ---- | 224 | 21 | ---- | 203 | ---- | |

## TABLE II.

*Showing, by Sex, the Ages of the Insane Persons in Michigan, Classified in Periods of Years, and the time in Years and Periods of Years those represented in Each Period of Age have been so Afflicted, with Totals for the State, for the year 1881.*

| Ages in Periods of Years. | Sex. | Total Number. | Time Afflicted, in Years and Periods of Years. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | —½. | ½ to 1. | 1 to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 10. | 10 to 15. | 15 to 20. | 20 to 30. | 30 to 40. | 40 to 50. | 50 to 60. | 60 to 70. | 70 and over. | Unknown. | Life. |
| 5 to 10 | Males | 1 | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | Females | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 10 to 15 | Males | 4 | -- | -- | -- | -- | -- | -- | -- | 4 | -- | -- | -- | -- | -- | -- | -- | -- | 2 |
| | Females | 1 | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 15 to 20 | Males | 31 | 2 | 2 | 3 | 5 | 4 | 1 | 4 | 4 | 1 | -- | -- | -- | -- | -- | -- | 5 | -- |
| | Females | 16 | 2 | 1 | 1 | 3 | -- | -- | 4 | 2 | 2 | -- | -- | -- | -- | -- | -- | 1 | 1 |
| 20 to 30 | Males | 134 | 3 | 10 | 13 | 11 | 7 | 11 | 33 | 8 | 4 | 6 | -- | -- | -- | -- | -- | 28 | 3 |
| | Females | 129 | 4 | 5 | 16 | 12 | 8 | 11 | 22 | 10 | 5 | 9 | -- | -- | -- | -- | -- | 27 | 5 |
| 30 to 40 | Males | 224 | 4 | 3 | 12 | 10 | 16 | 15 | 61 | 45 | 10 | 4 | 6 | -- | -- | -- | -- | 38 | 5 |
| | Females | 240 | 1 | 2 | 13 | 14 | 22 | 17 | 77 | 24 | 19 | 4 | 3 | -- | -- | -- | -- | 44 | 2 |
| 40 to 50 | Males | 161 | 1 | 6 | 12 | 14 | 9 | 9 | 43 | 16 | 14 | 5 | -- | 2 | -- | -- | -- | 30 | 2 |
| | Females | 257 | 4 | 3 | 14 | 8 | 14 | 12 | 66 | 42 | 25 | 21 | 3 | 6 | -- | -- | -- | 39 | 5 |
| 50 to 60 | Males | 115 | 1 | -- | 2 | 5 | 7 | 6 | 22 | 18 | 12 | 11 | 2 | -- | -- | -- | -- | 29 | -- |
| | Females | 150 | 1 | 3 | 6 | 9 | 9 | 3 | 27 | 27 | 14 | 19 | 8 | 2 | 1 | -- | -- | 21 | 1 |
| 60 to 70 | Males | 70 | 1 | 2 | 6 | 2 | 2 | 5 | 21 | 7 | 5 | 7 | 4 | 2 | -- | -- | -- | 6 | -- |
| | Females | 79 | -- | 1 | 1 | 5 | 3 | 2 | 18 | 4 | 8 | 15 | 6 | 2 | -- | 1 | -- | 13 | 1 |
| 70 and over | Males | 42 | -- | 1 | 2 | 4 | 2 | 3 | 9 | 7 | 4 | 2 | 3 | -- | 1 | -- | 1 | 3 | 1 |
| | Females | 45 | -- | -- | -- | 1 | 2 | 3 | 11 | 7 | 3 | 4 | 5 | 1 | -- | -- | -- | 8 | -- |
| Unknown | Males | 6 | 1 | -- | 2 | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | 2 | -- |
| | Females | 11 | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- | -- | -- | -- | 9 | -- |
| All ages | Males | 788 | 13 | 24 | 52 | 51 | 47 | 50 | 194 | 110 | 50 | 35 | 15 | 4 | 1 | -- | 1 | 141 | 13 |
| | Females | 928 | 12 | 15 | 51 | 52 | 58 | 48 | 226 | 116 | 77 | 73 | 25 | 11 | 1 | 1 | -- | 162 | 15 |
| | Totals | 1,716 | 25 | 39 | 103 | 103 | 105 | 98 | 420 | 226 | 127 | 108 | 40 | 15 | 2 | 1 | 1 | 303 | 28 |

## TABLE III.

*Showing, by Sex, the Ages of the Insane Persons in Michigan, Classified in Periods of Years, and the Time in Years those represented in each Period of Age have been under Medical Treatment, with Totals for the State, for the year 1881.*

| Ages in Periods of Years. | Sex. | Total Number. | Number Treated. | Time of Treatment, in Years. | | | | | | | | | | | | | | No. Never Treated. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½ | ½ to 1. | 1 to 1½. | 1½ to 2 | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 and over. | Unknown. | | |
| 5 to 10 | Males | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| | Females | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 10 to 15 | Males | 4 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 1 |
| | Females | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 15 to 20 | Males | 31 | 22 | 8 | 4 | 4 | 3 | 1 | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | 2 | 7 |
| | Females | 16 | 13 | 5 | 2 | ... | 2 | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | 1 | 2 | 1 |
| 20 to 30 | Males | 134 | 103 | 20 | 14 | 11 | 13 | 32 | 4 | 3 | 2 | 2 | ... | ... | ... | 1 | 1 | 3 | 28 |
| | Females | 129 | 99 | 14 | 14 | 14 | 12 | 20 | 6 | 6 | 3 | 4 | 1 | 2 | ... | 2 | 1 | 7 | 23 |
| 30 to 40 | Males | 224 | 178 | 22 | 11 | 10 | 14 | 60 | 12 | 15 | 7 | 5 | 3 | 7 | 2 | 10 | ... | 12 | 34 |
| | Females | 240 | 190 | 16 | 18 | 11 | 18 | 65 | 17 | 8 | 9 | 6 | 10 | 2 | 1 | 9 | ... | 17 | 33 |
| 40 to 50 | Males | 161 | 129 | 10 | 12 | 14 | 10 | 42 | 10 | 3 | 7 | 4 | 5 | 2 | 2 | 8 | ... | 10 | 22 |
| | Females | 257 | 216 | 16 | 16 | 12 | 15 | 72 | 22 | 12 | 8 | 10 | 8 | 4 | 1 | 17 | 3 | 15 | 26 |
| 50 to 60 | Males | 115 | 81 | 4 | 9 | 7 | 7 | 23 | 2 | 5 | 4 | 2 | 1 | 2 | 2 | 13 | ... | 8 | 26 |
| | Females | 150 | 103 | 4 | 12 | 9 | 8 | 23 | 6 | 6 | 6 | 8 | 5 | 2 | ... | 12 | 2 | 27 | 20 |
| 60 to 70 | Males | 70 | 53 | 6 | 8 | ... | 5 | 18 | 4 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 7 | 10 |
| | Females | 79 | 55 | 3 | 4 | 6 | 4 | 19 | 2 | 2 | 4 | ... | 2 | 1 | ... | 8 | ... | 9 | 15 |
| 70 and over | Males | 42 | 31 | 4 | 5 | 4 | 2 | 7 | 1 | 2 | ... | 3 | ... | 2 | ... | 1 | ... | 7 | 4 |
| | Females | 45 | 26 | ... | 1 | 3 | ... | 8 | 1 | 1 | 1 | 2 | 1 | ... | ... | 6 | 2 | 10 | 9 |
| Unknown | Males | 6 | 4 | 1 | ... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| | Females | 11 | 9 | 2 | 1 | 2 | 1 | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| All ages | Males | 788 | 602 | 76 | 63 | 52 | 55 | 183 | 34 | 30 | 21 | 18 | 11 | 14 | 7 | 36 | 2 | 51 | 135 |
| | Females | 928 | 712 | 61 | 68 | 57 | 60 | 210 | 57 | 35 | 31 | 30 | 27 | 11 | 2 | 54 | 9 | 88 | 128 |
| | Totals | 1,716 | 1,314 | 137 | 131 | 109 | 115 | 393 | 91 | 65 | 52 | 48 | 38 | 25 | 9 | 90 | 11 | 139 | 263 |

## TABLE IV.

*Showing, by Sex, the Time of Affliction, in Years and Periods of Years, of the Insane Persons in Michigan, and the Time of Medical Treatment of those represented in each Period of Time of Affliction, with Totals for the State, for the year 1881.*

| Time afflicted, in years and periods of years. | Sex. | Total Number | Number Treated. | Time of Treatment, in Years. | | | | | | | | | | | | | | | No. Never Treated. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½. | ½ to 1. | 1 to 1½. | 1½ to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 8 to 10. | 10 and over. | Unknown. | | |
| —½ | Males | 13 | 13 | 13 | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| | Females | 12 | 10 | 10 | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 1 |
| ½ to 1 | Males | 24 | 22 | 9 | 13 | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 1 |
| | Females | 15 | 13 | 7 | 6 | -- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | --- |
| 1 to 2 | Males | 52 | 48 | 9 | 12 | 16 | 11 | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 2 |
| | Females | 51 | 50 | 7 | 16 | 19 | 8 | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| 2 to 3 | Males | 51 | 50 | 6 | 5 | 8 | 13 | 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| | Females | 52 | 49 | 5 | 10 | 5 | 15 | 14 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 1 |
| 3 to 4 | Males | 47 | 43 | 6 | 7 | 6 | 4 | 17 | 3 | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 2 |
| | Females | 58 | 54 | 3 | 9 | 6 | 6 | 19 | 11 | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 3 |
| 4 to 5 | Males | 50 | 48 | 5 | 2 | 4 | --- | 22 | 10 | 4 | -- | -- | -- | 1 | -- | -- | -- | 1 | 1 |
| | Females | 48 | 43 | 2 | 2 | 4 | 2 | 16 | 6 | 11 | -- | -- | -- | -- | -- | -- | -- | 3 | 2 |
| 5 to 10 | Males | 194 | 173 | 10 | 12 | 8 | 16 | 66 | 10 | 15 | 14 | 11 | 3 | 4 | 3 | -- | 1 | 8 | 13 |
| | Females | 226 | 203 | 7 | 7 | 7 | 10 | 79 | 17 | 13 | 18 | 19 | 16 | 8 | -- | -- | 2 | 13 | 10 |
| 10 to 15 | Males | 110 | 98 | 11 | 7 | 5 | 3 | 26 | 2 | 3 | 5 | 6 | 3 | 8 | 3 | 16 | -- | 10 | 2 |
| | Females | 116 | 101 | 4 | 5 | 5 | 1 | 32 | 8 | 5 | 6 | 5 | 8 | 1 | 2 | 16 | 3 | 12 | 3 |
| 15 to 20 | Males | 50 | 41 | 2 | 2 | 1 | 1 | 13 | -- | 5 | -- | 1 | 4 | 1 | -- | 11 | -- | 7 | 2 |
| | Females | 77 | 61 | 1 | 5 | 3 | 1 | 20 | 6 | 1 | 3 | 1 | 2 | -- | -- | 17 | 1 | 15 | 1 |
| 20 to 30 | Males | 35 | 25 | 4 | --- | 1 | 2 | 7 | 1 | 1 | 1 | -- | -- | -- | -- | 8 | -- | 5 | 5 |
| | Females | 73 | 53 | 7 | 1 | 2 | 1 | 13 | 4 | 3 | 2 | 4 | 1 | 1 | -- | 13 | 1 | 13 | 7 |
| 30 to 40 | Males | 15 | 8 | --- | 1 | --- | --- | 5 | -- | 1 | -- | -- | -- | -- | -- | -- | 1 | 5 | 2 |
| | Females | 25 | 18 | 1 | 1 | 1 | 2 | 3 | 2 | -- | 2 | 1 | -- | 1 | -- | 2 | 2 | 6 | 1 |
| 40 to 50 | Males | 4 | 4 | --- | 1 | 1 | --- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| | Females | 11 | 6 | --- | --- | 1 | --- | 1 | -- | -- | -- | -- | -- | -- | -- | 4 | -- | 4 | 1 |
| 50 to 60 | Males | 1 | ----- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| | Females | 1 | ----- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| 60 to 70 | Males | ----- | ----- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| | Females | 1 | ----- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | 1 |
| 70 and over | Males | 1 | ----- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| | Females | ----- | ----- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| Unknown | Males | 141 | 29 | 1 | 1 | 2 | 5 | 7 | 8 | 1 | 1 | -- | 1 | -- | 1 | 1 | -- | 7 | 105 |
| | Females | 162 | 51 | 7 | 6 | 4 | 14 | 13 | 3 | 2 | -- | -- | -- | -- | -- | 2 | -- | 14 | 97 |
| All ages | Males | 788 | 602 | 76 | 63 | 52 | 55 | 183 | 34 | 30 | 21 | 18 | 11 | 14 | 7 | 36 | 2 | 51 | 135 |
| | Females | 928 | 712 | 61 | 68 | 57 | 60 | 210 | 57 | 35 | 31 | 30 | 27 | 11 | 2 | 54 | 9 | 88 | 128 |
| | Totals | 1,716 | 1,314 | 137 | 131 | 109 | 115 | 393 | 91 | 65 | 52 | 48 | 38 | 25 | 9 | 90 | 11 | 139 | 263 |

## TABLE V.

*Showing, by Sex, the Total Number of Insane Persons in Michigan; the Total number who have been inmates of Asylums for the Insane, and the length of time they have been inmates; the number who have never been inmates of any asylum, and the number of whom it is not reported whether they have been inmates of any asylum; for the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of insane persons | 1,716 | 788 | 928 |
| Total number who have been inmates of asylums | 1,260 | 592 | 668 |
| TIME IN YEARS, INMATES OF ASYLUMS. | | | |
| —½ | 73 | 49 | 24 |
| ½ to 1 | 70 | 31 | 39 |
| 1 to 1½ | 64 | 28 | 36 |
| 1½ to 2 | 77 | 36 | 41 |
| 2 to 3 | 113 | 42 | 71 |
| 3 to 4 | 83 | 39 | 44 |
| 4 to 5 | 54 | 25 | 29 |
| 5 to 6 | 46 | 18 | 28 |
| 6 to 7 | 45 | 17 | 28 |
| 7 to 8 | 37 | 11 | 26 |
| 8 to 9 | 25 | 15 | 10 |
| 9 to 10 | 9 | 7 | 2 |
| 10 and over | 75 | 32 | 43 |
| Unknown | 489 | 242 | 247 |
| Number who have never been inmates of any asylum | 285 | 115 | 170 |
| Number of whom it is not reported whether they have been inmates of any asylum | 171 | 81 | 90 |

## TABLE VI.

*Showing, by Sex, the Nativity and Parent-nativity of the Insane Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| **NATIVITY OF INSANE PERSONS.*** | | | |
| All nativities | 1,716 | 788 | 928 |
| Native | 967 | 460 | 507 |
| Foreign | 651 | 291 | 360 |
| Unknown | 98 | 37 | 61 |
| **NATIVITY OF PARENTS OF INSANE PERSONS.*** | | | |
| All nativities | 1,716 | 788 | 928 |
| Both parents native | 143 | 53 | 90 |
| Both parents foreign | 202 | 87 | 115 |
| Foreign father and native mother | 12 | 4 | 8 |
| Foreign mother and native father | 6 | 1 | 5 |
| Unknown mother, father native | 3 | 2 | 1 |
| Unknown mother, father foreign | 9 | 2 | 7 |
| Unknown father, mother native | 2 | 1 | 1 |
| Unknown father, mother foreign | 2 | ..... | 2 |
| Both unknown | 1,337 | 638 | 699 |
| One or both native | 166 | 61 | 105 |
| One or both foreign | 231 | 94 | 137 |

* "Native" includes only those born in the United States.

## TABLE VII.

*Showing the Estates and Incomes of the Insane Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of insane persons | 1,716 | 788 | 928 |
| Total number who have estates | 67 | 28 | 39 |
| VALUE OF ESTATES. | | | |
| Under $500 | 8 | 5 | 3 |
| $500 to $1,000 | 14 | 6 | 8 |
| $1,000 to $2,000 | 19 | 7 | 12 |
| $2,000 to $5,000 | 14 | 7 | 7 |
| $5,000 and over | 8 | 3 | 5 |
| Unknown | 4 | ..... | 4 |
| Number who have no estates | 468 | 203 | 265 |
| Number whose estates, if any, are not reported | 1,181 | 557 | 624 |
| Total number who have incomes | 83 | 31 | 52 |
| VALUE OF INCOMES. | | | |
| Under $100 | 5 | 1 | 4 |
| $100 to $200 | 4 | 1 | 3 |
| $200 to $500 | 9 | 4 | 5 |
| $500 to $1,000 | 2 | ..... | 2 |
| $1,000 and over | 2 | 1 | 1 |
| Unknown | 61 | 24 | 37 |
| Number who have no incomes | 474 | 206 | 268 |
| Number whose incomes, if any, are not reported | 1,159 | 551 | 608 |

## TABLE VIII.

*Estates and Incomes of the Relatives liable for the support of the Insane Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of insane persons | 1,716 | 788 | 928 |
| Total number whose relatives have estates | 94 | 26 | 68 |
| VALUE OF ESTATES OF RELATIVES LIABLE FOR THE SUPPORT OF SUCH PERSONS. | | | |
| Under $500 | 6 | 1 | 5 |
| $500 to $1,000 | 10 | 1 | 9 |
| $1,000 to $2,000 | 13 | 4 | 9 |
| $2,000 to $5,000 | 33 | 12 | 21 |
| $5,000 and over | 32 | 8 | 24 |
| Unknown | ..... | ..... | ..... |
| Number whose relatives have no estates | 28 | 11 | 17 |
| Number who have relatives whose estates, if any, are not reported | 29 | 7 | 22 |
| Total number whose relatives have incomes | 46 | 12 | 34 |
| VALUE OF INCOME OF RELATIVES LIABLE FOR SUPPORT OF SUCH PERSONS. | | | |
| Under $100 | 1 | ..... | 1 |
| $100 to $200 | 3 | 1 | 2 |
| $200 to $500 | 12 | 3 | 9 |
| $500 to $1,000 | 14 | 4 | 10 |
| $1,000 and over | 3 | 2 | 1 |
| Unknown | 13 | 2 | 11 |
| Number whose relatives have no incomes | 33 | 10 | 23 |
| Number who have relatives whose incomes, if any, are not reported | 72 | 22 | 50 |
| Number who have no relatives liable for their support | 455 | 207 | 248 |
| Number whose relatives liable for their support, if any, are not reported | 1,110 | 537 | 573 |

## TABLE IX.

*Showing, for the Insane Persons in Michigan, the Assigned Causes of Malady, and, by Sex, the Number Insane from each Cause.*

| CAUSES OF MALADY. | Males. | Females. | CAUSES OF MALADY. | Males. | Females. |
|---|---|---|---|---|---|
| Previous attacks | 23 | 39 | Over-study | 8 | 2 |
| Overwork and previous attacks | .... | 1 | Grief | .... | 11 |
| Previous attacks and over-exertion | 1 | .... | Grief and anxiety | 6 | 20 |
| Hereditary | 27 | 38 | Grief and catarrh | .... | 1 |
| Hereditary and old age | 1 | .... | Bereavement | .... | 2 |
| Hereditary and family trouble | 1 | 1 | Affliction | .... | 1 |
| Congenital | 5 | 7 | Loss of friends | 2 | 1 |
| From infancy | 1 | 1 | Loss of child | .... | 3 |
| Fright of mother | 1 | .... | Loss of children | .... | 1 |
| Defective organization | 7 | 13 | Loss of wife | 4 | .... |
| Idiocy | 3 | 2 | Loss of husband | .... | 9 |
| Old age | 5 | 7 | Loss of father | .... | 1 |
| Old age and family trouble | 1 | .... | Disappointed affections | 9 | 16 |
| Syphilis | 9 | 1 | Disappointment | 3 | 5 |
| Masturbation and sexual excesses | 1 | .... | Love affair | 1 | 1 |
| Masturbation and defective organization | 1 | .... | Desertion | .... | 1 |
| Masturbation | 14 | .... | Desertion of wife | 2 | .... |
| Loose living | .... | 2 | Jealousy | .... | 1 |
| Intemperance and sexual excesses | 1 | .... | Homesickness | 1 | .... |
| Excesses | 1 | .... | Despondency | 1 | .... |
| Intemperance | 45 | 5 | Domestic trouble | 32 | 84 |
| Intemperance and dissipation | 1 | .... | Domestic trouble and over-exertion | 1 | .... |
| Intemperance and exposure | 1 | .... | Drunkenness of husband | .... | 1 |
| Intemperance and opium habit | 1 | .... | False imprisonment | 1 | .... |
| Intemperance and previous attacks | 1 | .... | Imprisonment | 1 | .... |
| Vicious habits and intemp'ance | 3 | 2 | Trouble | 2 | 5 |
| Vicious habits | 68 | 6 | Trouble and insufficient food | .... | 1 |
| Previous attacks and excesses | 1 | .... | Rape | .... | 2 |
| Opium habit | 2 | 3 | Seduction | .... | 4 |
| Excitement | .... | 1 | Ill treatment | .... | 3 |
| Religious excitement | 14 | 21 | Harsh treatment and neglect | .... | 1 |
| Trouble and religious excitement | .... | 1 | Abuse and neglect | .... | 3 |
| Spiritualism | 3 | 1 | Abuse, and loss of children | .... | 1 |
| Solitary habits, and books on spiritualism | 1 | .... | Abuse by husband | .... | 3 |
| Popular errors and delusions | 4 | 4 | Cruelty and abuse | .... | 3 |
| California gold excitement | 1 | .... | Living alone | 1 | .... |
| Fright | 2 | 6 | Anxiety | 2 | .... |
| Chicago fire | .... | 1 | Care and anxiety | 2 | 3 |
| Fear of prosecution | 1 | .... | Ill health and anxiety | .... | 1 |
| Fear of disease diagnosed cancer | .... | 1 | Want and anxiety | 3 | 3 |
| Shock | 1 | .... | Business perplexities and grief | .... | 1 |
| Love of money | 1 | .... | Business perplexities | 6 | 5 |
| Miserliness | 1 | .... | Business reverses | 7 | .... |
| Over-study and religion | 1 | .... | Loss of property | 10 | 7 |
| | | | Prostration | .... | 1 |
| | | | Neurasthenia | .... | 1 |
| | | | Paralysis | 6 | 3 |
| | | | Hemiplegia | 1 | 1 |
| | | | Softening of the brain | 3 | 2 |
| | | | Apoplexy | 2 | .... |

TABLE IX.—CONTINUED.

| CAUSES OF MALADY. | Males. | Females. | CAUSES OF MALADY. | Males. | Females. |
|---|---|---|---|---|---|
| Inflammation of brain | 1 | 1 | Rheumatism | ---- | 1 |
| Rush of blood to head | 1 | 1 | Scarlet fever | 2 | 3 |
| Spinal disease and epilepsy | 1 | ---- | Diphtheria | ---- | 2 |
| Spinal disease | ---- | 2 | Measles | ---- | 1 |
| Miscarriage | ---- | 3 | Chronic diarrhea | 1 | ---- |
| Induced abortion | ---- | 2 | Tuberculosis | ---- | 2 |
| Childbirth and religious excitement | ---- | 1 | Hemorrhage | ---- | 2 |
| Puerperal | ---- | 50 | Varicose ulcer | ---- | 1 |
| Taking cold during confinement | ---- | 1 | Painter's colic | 1 | ---- |
| Gestation | ---- | 1 | Over-exertion | 16 | 21 |
| Prolonged lactation | ---- | 2 | Prolonged over-exertion | 3 | ---- |
| Disordered milk | ---- | 1 | Over-exertion and grief | 1 | ---- |
| Uterine disease | ---- | 9 | Over-work and anxiety | 1 | 1 |
| Change of life and female disease | ---- | 1 | Over-work and old age | 1 | ---- |
| Change of life | ---- | 17 | Over-work and ill health | 1 | ---- |
| Female disease | ---- | 7 | Over-exertion of body and mind | ---- | 1 |
| Dysmenorrhea | ---- | 1 | Prolonged draft on vitality | ---- | 5 |
| Irregularity of menses | ---- | 12 | Exposure | 2 | 1 |
| Malarial or uterine trouble | ---- | 1 | Exposure in army | 3 | ---- |
| Ovarian | ---- | 2 | Hardships and exposure | 1 | ---- |
| Pubescence | 1 | ---- | Hardships in rebel prison | 2 | ---- |
| Epilepsy—took cold at first menstrual period | ---- | 1 | Raising too large family | ---- | 1 |
| Epilepsy | 53 | 45 | Sun-stroke | 9 | 2 |
| Fits | 5 | 4 | Accident | 2 | 1 |
| Epilepsy and ague | ---- | 1 | Injury | 1 | 5 |
| Debility | ---- | 5 | Injury to head | 13 | 3 |
| Debility from malarial poison, and poverty | 1 | ---- | Injury to spine | ---- | 2 |
| Sickness | 17 | 20 | Kick on head by horse | 1 | ---- |
| Ill health | 19 | 50 | Kick of horse | 1 | ---- |
| Fever | ---- | 3 | Thrown from a horse | 2 | ---- |
| Fever and neuralgia | ---- | 1 | Fracture of skull | 1 | ---- |
| Neuralgia | ---- | 1 | Fall in infancy | ---- | 1 |
| Nervous typhoid fever | ---- | 1 | Fall on ice | ---- | 1 |
| Typhoid fever | 4 | 5 | Hurt by a rail falling on him | 1 | ---- |
| Malarial fever | ---- | 1 | Defective training | ---- | 7 |
| Ague | ---- | 1 | Mal-treatment for salt-rheum | ---- | 1 |
| Enlargement of spleen | ---- | 1 | Over-dose of medicine, and abuse by drunken husband | ---- | 1 |
| Bilious fever | ---- | 1 | Taking powerful medicine by mistake | ---- | 1 |
| Derangement of liver | ---- | 1 | Ungovernable temper | 1 | 4 |
| | | | Unassigned | 245 | 221 |
| Totals | | | | 788 | 928 |

## TABLE X.

*Showing the Occupations, previous to Insanity, of the Insane Persons in Michigan, and, by Sex, the number engaged in each Occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Accountants and wives | 3 | 1 | Gunsmiths | 1 | ---- |
| Agents | ---- | 1 | Hardware merchants | 1 | ---- |
| Artists | 1 | 1 | Harness-makers and wives | 1 | 2 |
| Attorneys | 1 | ---- | Hotel keepers' wives | ---- | 1 |
| Auctioneers | 1 | ---- | Housekeepers | ---- | 220 |
| Bakers | 3 | ---- | House-workers | ---- | 20 |
| Bankers | 1 | ---- | Hunters | 1 | ---- |
| Bank-tellers | 1 | ---- | Insurance agents | 2 | ---- |
| Barbers and wives | 3 | 2 | Insurance agents' sons | 1 | ---- |
| Blacksmiths and wives | 11 | 9 | Iron-moulders and wives | 1 | 1 |
| Boiler-makers | 3 | ---- | Jewelers | 2 | ---- |
| Book-keepers and wives | 7 | 1 | Laborers | 197 | 14 |
| Brewers | 1 | ---- | Laborers in saw-mills | 1 | 1 |
| Brick-masons | 2 | ---- | Laborers' sons and daughters | 3 | 4 |
| Brush-makers | ---- | 1 | Laborers' wives | ---- | 46 |
| Builders' wives | ---- | 2 | Lake captains' wives | ---- | 1 |
| Butchers and wives | 4 | 1 | Laundresses | ---- | 4 |
| Butchers' daughters | ---- | 1 | Lawyers and wives | 3 | 3 |
| Cabinet-makers' sons and daughters | 1 | 1 | Lawyers' daughters | ---- | 2 |
| Cabinet-makers' wives | ---- | 2 | Lecturers | ---- | 1 |
| Capitalists' daughters | ---- | 1 | Liverymen | 2 | ---- |
| Captains' wives | ---- | 3 | Locomotive firemen | 1 | ---- |
| Carpenters and wives | 18 | 9 | Lumbermen and wives | 6 | 1 |
| Carpenters' sons | 2 | ---- | Lumbermen's daughters | ---- | 1 |
| Carriage-ironers | 1 | ---- | Machinists | 3 | ---- |
| Children | 2 | 3 | Manufacturers' wives | ---- | 1 |
| Cigar-makers and wives | 4 | 2 | Masons and wives | 2 | 4 |
| Civil engineers and wives | 1 | 1 | Masons' daughters | ---- | 2 |
| Clergymen and wives | 2 | 5 | Match peddlers | 1 | ---- |
| Clerks | 8 | 3 | Matrons | ---- | 1 |
| Colliers' sons | 1 | ---- | Mechanics and wives | 3 | 6 |
| Commercial travelers and wives | 3 | 1 | Mechanics' daughters | ---- | 1 |
| Coopers and wives | 4 | 4 | Merchants and wives | 8 | 16 |
| Domestics | ---- | 49 | Merchants' daughters | ---- | 4 |
| Dressmakers | ---- | 3 | Millers and wives | 1 | 2 |
| Druggists and wives | 3 | 2 | Mill hands | 1 | ---- |
| Dyers | 1 | ---- | Milliners | ---- | 4 |
| Engineers and wives | 3 | 1 | Miners and wives | 6 | 9 |
| Farmers | 225 | 10 | Moulders' wives | ---- | 1 |
| Farmers' wives | ---- | 149 | Music teachers | 2 | 5 |
| Farmers and blacksmiths | 1 | ---- | No occupation | 55 | 73 |
| Farmers and fishermen | 1 | ---- | Not reported | 25 | 63 |
| Farmers' sons and daughters | 16 | 43 | Painters and wives | 6 | 3 |
| Farm laborers and wives | 35 | 4 | Painters' sons and daughters | 2 | 1 |
| Finishers | 1 | ---- | Peddlers | 2 | ---- |
| Firemen and wives | 1 | 2 | Physicians and wives | 6 | 4 |
| Fortune-tellers | ---- | 1 | Physicians' daughters | ---- | 1 |
| Gamblers | 2 | ---- | Plumbers and wives | 1 | 1 |
| Gardeners | 2 | ---- | Policemen | 2 | ---- |
| Grocers' wives | ---- | 1 | Printers and wives | 2 | 3 |
| | | | Pupils | ---- | 2 |

TABLE X.—CONTINUED.

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Raftsmen's wives | ---- | 1 | Stock-dealers' wives | ---- | 2 |
| Railroad agents | 1 | ---- | Stone-masons | 1 | ---- |
| Railroad conductors and wives | 1 | 1 | Students | 6 | 3 |
| Railroad employés and wives | 6 | 2 | Tailors and wives | 6 | 4 |
| Railroad employés' daughters | ---- | 1 | Tailoresses | ---- | 4 |
| Saddlers | 1 | ---- | Tanners and curriers | 3 | ---- |
| Sailors and wives | 9 | 2 | Teachers | ---- | 21 |
| Saloon keepers' wives | ---- | 1 | Teachers' daughters | ---- | 1 |
| School teachers | ---- | 3 | Telegraphers and wives | 1 | 1 |
| Seamstresses | ---- | 10 | Telegraph sup'ts' wives | ---- | 1 |
| Servants | ---- | 13 | Tinners | 2 | ---- |
| Ship-carpenters and wives | 1 | 2 | Tinners (itinerant) | 1 | ---- |
| Shoemakers and wives | 8 | 4 | Upholsterers and wives | 1 | 1 |
| Shoemakers' sons | 1 | ---- | Well-diggers | 1 | ---- |
| Shop-keepers | 1 | ---- | Wood-sawyers | 1 | ---- |
| Soldiers | 5 | ---- | Woolen manufacturers' wives | ---- | 1 |
| Total | | | | 788 | 928 |

## TABLE XI.

*Showing, for the State and Counties, by Sex, the Number of Deaf and Dumb Persons ported, for the*

| Number. | State, Counties, and Institutions. | Sex. | Number. | Color. | | | | | Conjugal Conditions. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | State | Totals | 689 | 679 | | 6 | 2 | 2 | 603 | 74 | 8 | 2 | 2 |
| | | Males | 378 | 371 | | 3 | 2 | 2 | 333 | 39 | 2 | 2 | 2 |
| | | Females | 311 | 308 | | 3 | | | 270 | 35 | 6 | | |
| 2 | Alcona | Males | 2 | 2 | | | | | 2 | | | | |
| | | Females | | | | | | | | | | | |
| 3 | Allegan | Males | 5 | 5 | | | | | 3 | 2 | | | |
| | | Females | 4 | 4 | | | | | 3 | 1 | | | |
| 4 | Antrim | Males | | | | | | | | | | | |
| | | Females | 3 | 3 | | | | | 3 | | | | |
| 5 | Barry | Males | 6 | 6 | | | | | 6 | | | | |
| | | Females | 3 | 3 | | | | | 3 | | | | |
| 6 | Bay | Males | 3 | 3 | | | | | 3 | | | | |
| | | Females | 4 | 4 | | | | | 3 | 1 | | | |
| 7 | Benzie | Males | | | | | | | | | | | |
| | | Females | 1 | 1 | | | | | 1 | | | | |
| 8 | Berrien | Males | 15 | 15 | | | | | 13 | 2 | | | |
| | | Females | 8 | 8 | | | | | 7 | 1 | | | |
| 9 | Branch | Males | 5 | 5 | | | | | 4 | 1 | | | |
| | | Females | 2 | 2 | | | | | 1 | 1 | | | |
| 10 | Calhoun | Males | 5 | 5 | | | | | 5 | | | | |
| | | Females | 1 | 1 | | | | | 1 | | | | |
| 11 | Cass | Males | 4 | 3 | | 1 | | | 4 | | | | |
| | | Females | 5 | 4 | | 1 | | | 5 | | | | |
| 12 | Cheboygan | Males | 1 | 1 | | | | | 1 | | | | |
| | | Females | 2 | 2 | | | | | 2 | | | | |
| 13 | Clinton | Males | 4 | 4 | | | | | 3 | 1 | | | |
| | | Females | 8 | 8 | | | | | 6 | 2 | | | |
| 14 | Eaton | Males | 2 | 2 | | | | | | 2 | | | |
| | | Females | 9 | 9 | | | | | 6 | 1 | 2 | | |
| 15 | Genesee[1] | Males | 10 | 10 | | | | | 4 | 6 | | | |
| | | Females | 6 | 6 | | | | | 3 | 3 | | | |

[1] Exclusive of the Fourth Ward of Flint. See "Deaf and Dumb Institute," near the end of this table.

## TABLE XI.

*in Michigan, their Color, Conjugal and Mental Condition, Health, Habits, and How Sup-*
*year 1881.*

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Unformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| 632 | 14 | 38 | 5 | 620 | 36 | 17 | 16 | 458 | 9 | 1 | 180 | 41 | 525 | 8 | 149 | 7 | |
| 348 | 4 | 24 | 2 | 343 | 17 | 8 | 10 | 243 | 5 | 1 | 107 | 22 | 294 | 3 | 81 | ---- | 1 |
| 284 | 10 | 14 | 3 | 277 | 19 | 9 | 6 | 215 | 4 | ---- | 73 | 19 | 231 | 5 | 68 | 7 | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 2 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 5 | ---- | ---- | ---- | 4 | 1 | ---- | ---- | 3 | ---- | ---- | 2 | ---- | 4 | ---- | 1 | ---- | 3 |
| 4 | ---- | ---- | ---- | 3 | 1 | ---- | ---- | 3 | ---- | ---- | 1 | ---- | 3 | ---- | ---- | 1 | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 4 |
| 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | |
| 6 | ---- | ---- | ---- | 6 | ---- | ---- | ---- | 5 | ---- | ---- | ---- | 1 | 5 | ---- | 1 | ---- | 5 |
| ---- | 1 | 2 | ---- | 2 | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 1 | 2 | 1 | ---- | ---- | |
| 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 2 | ---- | 1 | ---- | ---- | 3 | ---- | ---- | ---- | 6 |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 7 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- | |
| 13 | 1 | 1 | ---- | 13 | 1 | 1 | ---- | 11 | ---- | ---- | 3 | 1 | 14 | ---- | 1 | ---- | 8 |
| 7 | 1 | ---- | ---- | 7 | ---- | 1 | ---- | 5 | ---- | ---- | 2 | 1 | 6 | ---- | 1 | 1 | |
| 5 | ---- | ---- | ---- | 3 | ---- | 1 | 1 | 3 | ---- | ---- | 2 | ---- | 5 | ---- | ---- | ---- | 9 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 4 | ---- | 1 | ---- | 5 | ---- | ---- | ---- | 3 | 1 | ---- | 1 | ---- | 5 | ---- | ---- | ---- | 10 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 2 | 1 | 1 | ---- | 4 | ---- | ---- | ---- | 1 | 2 | ---- | 1 | ---- | 4 | ---- | ---- | ---- | 11 |
| 4 | ---- | 1 | ---- | 4 | 1 | ---- | ---- | 3 | 1 | ---- | ---- | 1 | 3 | 2 | ---- | ---- | |
| 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 12 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | ---- | ---- | 2 | ---- | 1 | ---- | ---- | 1 | |
| 4 | ---- | ---- | ---- | 2 | 1 | 1 | ---- | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 13 |
| 8 | ---- | ---- | ---- | 8 | ---- | ---- | ---- | 3 | ---- | ---- | 5 | ---- | 8 | ---- | ---- | ---- | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 14 |
| 9 | ---- | ---- | ---- | 7 | 2 | ---- | ---- | 6 | ---- | ---- | 3 | ---- | 8 | ---- | ---- | 1 | |
| 10 | ---- | ---- | ---- | 8 | 1 | 1 | ---- | 8 | ---- | ---- | ---- | 2 | 9 | ---- | 1 | ---- | 15 |
| 5 | 1 | ---- | ---- | 3 | 3 | ---- | ---- | 5 | ---- | ---- | 1 | ---- | 6 | ---- | ---- | ---- | |

TABLE XI.—CONTINUED.

| Number. | Counties and Institutions. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Grand Traverse | Males | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| 2 | Gratiot | Males | 3 | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- |
| | | Females | 3 | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- |
| 3 | Hillsdale | Males | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| | | Females | 6 | 6 | ---- | ---- | ---- | ---- | 6 | ---- | ---- | ---- | ---- |
| 4 | Houghton | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| 5 | Huron | Males | 9 | 8 | ---- | ---- | ---- | 1 | 9 | ---- | ---- | ---- | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 7 | ---- | ---- | ---- | ---- |
| 6 | Ingham | Males | 2 | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| 7 | Ionia | Males | 12 | 12 | ---- | ---- | ---- | ---- | 10 | 2 | ---- | ---- | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 4 | 3 | ---- | ---- | ---- |
| 8 | Iosco | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 9 | Isabella | Males | 3 | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 10 | Jackson | Males | 11 | 10 | ---- | ---- | ---- | 1 | 6 | 2 | ---- | 2 | 1 |
| | | Females | 5 | 5 | ---- | ---- | ---- | ---- | 2 | 3 | ---- | ---- | ---- |
| 11 | Kalamazoo | Males | 5 | 5 | ---- | ---- | ---- | ---- | 3 | 2 | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| 12 | Kalkaska | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| 13 | Kent | Males | 8 | 8 | ---- | ---- | ---- | ---- | 4 | 4 | ---- | ---- | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 3 | 4 | ---- | ---- | ---- |
| 14 | Keweenaw | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| 15 | Lake | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 16 | Lapeer | Males | 10 | 10 | ---- | ---- | ---- | ---- | 9 | 1 | ---- | ---- | ---- |
| | | Females | 4 | 4 | ---- | ---- | ---- | ---- | 3 | 1 | ---- | ---- | ---- |
| 17 | Leelanaw | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| 18 | Lenawee | Males | 8 | 8 | ---- | ---- | ---- | ---- | 5 | 2 | ---- | ---- | 1 |
| | | Females | 11 | 11 | ---- | ---- | ---- | ---- | 10 | ---- | 1 | ---- | |

TABLE XI.—CONTINUED.

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uniformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | NUMBER. |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- | 1 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | |
| 2 | ---- | 1 | ---- | 3 | ---- | ---- | ---- | ---- | ---- | ---- | 3 | ---- | 3 | ---- | ---- | ---- | 2 |
| 3 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | 2 | ---- | ---- | 1 | ---- | 3 | ---- | ---- | ---- | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 3 |
| 6 | ---- | ---- | ---- | 6 | ---- | ---- | ---- | 4 | ---- | ---- | 2 | ---- | 6 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 4 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | |
| 8 | ---- | ---- | 1 | 9 | ---- | ---- | ---- | 3 | ---- | ---- | 4 | 2 | 9 | ---- | ---- | ---- | 5 |
| 5 | ---- | ---- | 2 | 7 | ---- | ---- | ---- | 3 | ---- | ---- | 3 | 1 | 6 | ---- | ---- | 1 | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 6 |
| 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | |
| 12 | ---- | ---- | ---- | 9 | 2 | 1 | ---- | 10 | ---- | ---- | 2 | ---- | 12 | ---- | ---- | ---- | 7 |
| 7 | ---- | ---- | ---- | 7 | ---- | ---- | ---- | 5 | ---- | ---- | 2 | ---- | 6 | ---- | 1 | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 8 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | 3 | ---- | ---- | ---- | 9 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 8 | ---- | 2 | 1 | 10 | ---- | ---- | 1 | 7 | ---- | ---- | 2 | 2 | 10 | ---- | 1 | ---- | 10 |
| 5 | ---- | ---- | ---- | 5 | ---- | ---- | ---- | 5 | ---- | ---- | ---- | ---- | 5 | ---- | ---- | ---- | |
| 5 | ---- | ---- | ---- | 4 | ---- | 1 | ---- | 4 | ---- | ---- | 1 | ---- | 5 | ---- | ---- | ---- | 11 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 12 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 7 | 1 | ---- | ---- | 7 | ---- | ---- | 1 | 6 | 1 | ---- | 1 | ---- | 8 | ---- | ---- | ---- | 13 |
| 5 | 1 | 1 | ---- | 4 | 2 | ---- | 1 | 7 | ---- | ---- | ---- | ---- | 7 | ---- | ---- | ---- | |
| ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 14 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 15 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 8 | ---- | 2 | ---- | 9 | ---- | ---- | 1 | 7 | 1 | ---- | 2 | ---- | 9 | ---- | 1 | ---- | 16 |
| 3 | ---- | 1 | ---- | 2 | 1 | 1 | ---- | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 17 |
| 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- | |
| 8 | ---- | ---- | ---- | 7 | 1 | ---- | ---- | 8 | ---- | ---- | ---- | ---- | 8 | ---- | ---- | ---- | 18 |
| 9 | 2 | ---- | ---- | 10 | 1 | ---- | ---- | 8 | 1 | ---- | 2 | ---- | 8 | 1 | 2 | ---- | |

TABLE XI.—CONTINUED.

| Number. | Counties and Institutions. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Livingston | Males | 3 | 3 | | | | | 2 | 1 | | | |
| | | Females | 1 | 1 | | | | | | 1 | | | |
| 2 | Mackinac | Males | 1 | | | | 1 | | 1 | | | | |
| | | Females | 2 | 2 | | | | | 2 | | | | |
| 3 | Macomb | Males | 9 | 9 | | | | | 8 | 1 | | | |
| | | Females | 6 | 6 | | | | | 6 | | | | |
| 4 | Manistee | Males | | | | | | | | | | | |
| | | Females | 2 | 2 | | | | | 1 | | 1 | | |
| 5 | Marquette | Males | 4 | 4 | | | | | 4 | | | | |
| | | Females | 4 | 4 | | | | | 4 | | | | |
| 6 | Mason | Males | 2 | 2 | | | | | 2 | | | | |
| | | Females | 1 | 1 | | | | | 1 | | | | |
| 7 | Mecosta | Males | 1 | 1 | | | | | 1 | | | | |
| | | Females | 2 | 2 | | | | | 2 | | | | |
| 8 | Menominee | Males | 2 | 2 | | | | | 2 | | | | |
| | | Females | 1 | 1 | | | | | 1 | | | | |
| 9 | Midland | Males | 1 | 1 | | | | | 1 | | | | |
| | | Females | | | | | | | | | | | |
| 10 | Monroe | Males | 9 | 9 | | | | | 8 | | 1 | | |
| | | Females | 4 | 4 | | | | | 4 | | | | |
| 11 | Montcalm | Males | 2 | 2 | | | | | 2 | | | | |
| | | Females | 1 | 1 | | | | | 1 | | | | |
| 12 | Muskegon | Males | 3 | 3 | | | | | 2 | 1 | | | |
| | | Females | 1 | 1 | | | | | | 1 | | | |
| 13 | Oakland | Males | 1 | 1 | | | | | | 1 | | | |
| | | Females | 5 | 5 | | | | | 4 | 1 | | | |
| 14 | Oceana | Males | 2 | 1 | | | 1 | | 2 | | | | |
| | | Females | 2 | 2 | | | | | 1 | 1 | | | |
| 15 | Osceola | Males | 2 | 2 | | | | | 2 | | | | |
| | | Females | 1 | 1 | | | | | 1 | | | | |
| 16 | Otsego | Males | 1 | 1 | | | | | 1 | | | | |
| | | Females | | | | | | | | | | | |
| 17 | Ottawa | Males | 4 | 4 | | | | | 4 | | | | |
| | | Females | 2 | 2 | | | | | 1 | | 1 | | |
| 18 | Saginaw | Males | 8 | 8 | | | | | 7 | 1 | | | |
| | | Females | 7 | 7 | | | | | 5 | 2 | | | |

TABLE XI.—CONTINUED.

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uninformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| 3 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 1 |
| 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 2 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 2 | ---- | |
| 9 | ---- | ---- | ---- | 7 | 1 | ---- | 1 | 8 | ---- | ---- | 1 | ---- | 8 | 1 | ---- | ---- | 3 |
| 5 | ---- | 1 | ---- | 5 | ---- | ---- | 1 | 4 | ---- | ---- | 2 | ---- | 6 | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 4 |
| 2 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 4 | ---- | ---- | ---- | 3 | ---- | ---- | 1 | 3 | ---- | ---- | 1 | ---- | 4 | ---- | ---- | ---- | 5 |
| 3 | ---- | 1 | ---- | 4 | ---- | ---- | ---- | 2 | ---- | ---- | 2 | ---- | 2 | 1 | ---- | 1 | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 6 |
| 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 7 |
| 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 8 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 9 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 8 | ---- | 1 | ---- | 7 | 1 | ---- | 1 | 7 | ---- | ---- | 2 | ---- | 8 | ---- | 1 | ---- | 10 |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 3 | ---- | ---- | 1 | ---- | 4 | ---- | ---- | ---- | |
| 2 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 11 |
| ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 2 | ---- | 1 | ---- | 2 | 1 | ---- | ---- | 2 | ---- | ---- | 1 | ---- | 2 | 1 | ---- | ---- | 12 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 13 |
| 5 | ---- | ---- | ---- | 5 | ---- | ---- | ---- | 4 | ---- | ---- | 1 | ---- | 5 | ---- | ---- | ---- | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 14 |
| 1 | ---- | ---- | 1 | 2 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | 1 | 1 | ---- | ---- | 1 | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | ---- | ---- | 2 | ---- | 2 | ---- | ---- | ---- | 15 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 16 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 4 | ---- | ---- | ---- | 3 | ---- | ---- | 1 | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 17 |
| 2 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | 1 | 1 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | |
| 8 | ---- | ---- | ---- | 8 | ---- | ---- | ---- | 6 | ---- | ---- | 2 | ---- | 8 | ---- | ---- | ---- | 18 |
| 7 | ---- | ---- | ---- | 7 | ---- | ---- | ---- | 6 | ---- | ---- | 1 | ---- | 7 | ---- | ---- | ---- | |

TABLE XI.—CONTINUED.

| Number. | Counties and Institutions. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Sanilac | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 3 | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- |
| 2 | Shiawassee | Males | 4 | 4 | ---- | ---- | ---- | ---- | 2 | 2 | ---- | ---- | ---- |
| | | Females | 3 | 3 | ---- | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- |
| 3 | St. Clair | Males | 11 | 11 | ---- | ---- | ---- | ---- | 10 | 1 | ---- | ---- | ---- |
| | | Females | 6 | 6 | ---- | ---- | ---- | ---- | 5 | 1 | ---- | ---- | ---- |
| 4 | St. Joseph | Males | 2 | 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- |
| | | Females | 4 | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | ---- |
| 5 | Tuscola | Males | 6 | 6 | ---- | ---- | ---- | ---- | 6 | ---- | ---- | ---- | ---- |
| | | Females | 8 | 8 | ---- | ---- | ---- | ---- | 8 | ---- | ---- | ---- | ---- |
| 6 | Van Buren | Males | 5 | 5 | ---- | ---- | ---- | ---- | 4 | 1 | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- |
| 7 | Washtenaw | Males | 5 | 5 | ---- | ---- | ---- | ---- | 4 | 1 | ---- | ---- | ---- |
| | | Females | 9 | 9 | ---- | ---- | ---- | ---- | 8 | 1 | ---- | ---- | ---- |
| 8 | Wayne[1] | Males | 4 | 4 | ---- | ---- | ---- | ---- | 3 | 1 | ---- | ---- | ---- |
| | | Females | 5 | 5 | ---- | ---- | ---- | ---- | 4 | 1 | ---- | ---- | ---- |
| 9 | Wexford | Males | 2 | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 10 | Deaf and Dumb Institute[2] | Males | 115 | 113 | ---- | 2 | ---- | ---- | 115 | ---- | ---- | ---- | ---- |
| | | Females | 96 | 94 | ---- | 2 | ---- | ---- | 95 | ---- | 1 | ---- | ---- |
| 11 | German Deaf and Dumb Asylum[3] | Males | 27 | 27 | ---- | ---- | ---- | ---- | 27 | ---- | ---- | ---- | ---- |
| | | Females | 16 | 16 | ---- | ---- | ---- | ---- | 16 | ---- | ---- | ---- | ---- |

[1] Exclusive of the township of Hamtramck.
[2] Includes the entire Fourth Ward of Flint.
[3] Includes the entire township of Hamtramck, Wayne county, in which the institution is located.

TABLE XI.—CONTINUED.

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uninformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | NUMBER. |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 |
| 3 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 2 | ---- | 1 | ---- | |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 3 | ---- | ---- | 1 | ---- | 4 | ---- | ---- | ---- | 2 |
| 3 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | 1 | 3 | ---- | ---- | ---- | |
| 8 | ---- | 3 | ---- | 10 | ---- | 1 | ---- | 8 | ---- | ---- | 3 | ---- | 9 | ---- | 2 | ---- | 3 |
| 5 | 1 | ---- | ---- | 5 | ---- | ---- | 1 | 5 | 1 | ---- | ---- | ---- | 5 | ---- | 1 | ---- | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 4 |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 2 | ---- | ---- | 2 | ---- | 4 | ---- | ---- | ---- | |
| 6 | ---- | ---- | ---- | 5 | 1 | ---- | ---- | 5 | ---- | ---- | 1 | ---- | 5 | ---- | 1 | ---- | 5 |
| 8 | ---- | ---- | ---- | 7 | ---- | 1 | ---- | 6 | ---- | ---- | 2 | ---- | 8 | ---- | ---- | ---- | |
| 5 | ---- | ---- | ---- | 3 | ---- | 1 | 1 | 4 | ---- | ---- | 1 | ---- | 5 | ---- | ---- | ---- | 6 |
| 2 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- | |
| 5 | ---- | ---- | ---- | 5 | ---- | ---- | ---- | 4 | ---- | ---- | 1 | ---- | 4 | 1 | ---- | ---- | 7 |
| 7 | ---- | 2 | ---- | 6 | 3 | ---- | ---- | 4 | ---- | ---- | 4 | 1 | 9 | ---- | ---- | ---- | |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 8 |
| 5 | ---- | ---- | ---- | 4 | ---- | ---- | 1 | 4 | ---- | ---- | ---- | 1 | 4 | ---- | 1 | ---- | |
| 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | 9 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 113 | 1 | 1 | ---- | 115 | ---- | ---- | ---- | 71 | ---- | ---- | 44 | ---- | 70 | ---- | 45 | ---- | 10 |
| 94 | 1 | 1 | ---- | 96 | ---- | ---- | ---- | 77 | ---- | ---- | 19 | ---- | 56 | ---- | 40 | ---- | |
| 18 | ---- | 9 | ---- | 25 | 2 | ---- | ---- | 1 | ---- | ---- | 14 | 12 | 1 | ---- | 26 | ---- | 11 |
| 12 | ---- | 4 | ---- | 15 | 1 | ---- | ---- | ---- | ---- | ---- | 8 | 8 | ---- | ---- | 16 | ---- | |

## TABLE XII.

*Showing, by Sex, the Ages of the Deaf and Dumb Persons in Michigan, Classified in Years and Periods of Years, and the time in Years and Periods of Years those represented in Each Period of Age have been so Afflicted, with Totals for the State, for the year 1881.*

| Ages in Years and Periods of Years. | Sex. | Total Number. | Time Afflicted, in Years and Periods of Years. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | —½. | ½ to 1. | 1 to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 10. | 10 to 15. | 15 to 20. | 20 to 30. | 30 to 40. | 40 to 50. | 50 to 60. | 60 to 70. | 70 and over. | Unknown. | Life. |
| 2 to 3 | Males | ----- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | Females | 1 | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| 3 to 4 | Males | ----- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | Females | 2 | -- | -- | -- | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| 4 to 5 | Males | 2 | -- | -- | -- | -- | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 |
| | Females | 1 | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| 5 to 10 | Males | 33 | -- | -- | -- | -- | -- | 1 | 32 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 17 |
| | Females | 31 | -- | -- | 1 | -- | -- | 1 | 28 | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 9 |
| 10 to 15 | Males | 110 | -- | -- | -- | -- | -- | -- | 55 | 54 | -- | -- | -- | -- | -- | -- | -- | 1 | 28 |
| | Females | 75 | -- | -- | 1 | -- | 2 | -- | 33 | 36 | -- | -- | -- | -- | -- | -- | -- | 3 | 16 |
| 15 to 20 | Males | 67 | -- | -- | -- | -- | -- | -- | 2 | 20 | 45 | -- | -- | -- | -- | -- | -- | -- | 18 |
| | Females | 58 | -- | -- | -- | -- | -- | -- | 1 | 13 | 44 | -- | -- | -- | -- | -- | -- | -- | 19 |
| 20 to 30 | Males | 75 | -- | -- | -- | -- | -- | -- | -- | 4 | 6 | 63 | -- | -- | -- | -- | -- | 2 | 39 |
| | Females | 61 | -- | -- | -- | -- | -- | -- | -- | -- | 18 | 43 | -- | -- | -- | -- | -- | -- | 30 |
| 30 to 40 | Males | 37 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6 | 29 | -- | -- | -- | -- | 2 | 16 |
| | Females | 29 | -- | -- | -- | -- | -- | -- | -- | 1 | 1 | 3 | 24 | -- | -- | -- | -- | -- | 13 |
| 40 to 50 | Males | 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 7 | 15 | -- | -- | -- | 2 | 9 |
| | Females | 27 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 23 | -- | -- | -- | -- | 16 |
| 50 to 60 | Males | 17 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | 3 | 12 | -- | -- | 1 | 6 |
| | Females | 11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 7 | -- | -- | -- | 5 |
| 60 to 70 | Males | 11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 8 | -- | -- | 3 |
| | Females | 7 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | 6 | -- | -- | 4 |
| 70 and over | Males | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- | 1 |
| | Females | 5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5 | -- | 2 |
| Unknown | Males | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- |
| | Females | 3 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | -- |
| All ages | Males | 378 | -- | -- | -- | -- | -- | 3 | 89 | 78 | 51 | 70 | 36 | 18 | 15 | 8 | 1 | 9 | 139 |
| | Females | 311 | -- | -- | 2 | 1 | 4 | 2 | 62 | 50 | 63 | 47 | 28 | 27 | 7 | 6 | 5 | 7 | 117 |
| | Totals | 689 | -- | -- | 2 | 1 | 4 | 5 | 151 | 128 | 114 | 117 | 64 | 45 | 22 | 14 | 6 | 16 | 256 |

## TABLE XIII.

*Showing, by Sex, the Ages of the Deaf and Dumb Persons in Michigan, Classified in Years and Periods of Years, and the Time in Years those represented in each Period of Age have been under Medical Treatment, with Totals for the State, for the year 1881.*

| Ages in Years and Periods of Years. | Sex. | Total Number. | Number Treated. | Time of Treatment, in Years. | | | | | | | | | | | | | No. Never Treated. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½. | ½ to 1. | 1 to 1½. | 1½ to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 and over. | Unknown. | | |
| 2 to 3 | Males | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Females | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... |
| 3 to 4 | Males | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Females | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| 4 to 5 | Males | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| | Females | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... |
| 5 to 10 | Males | 33 | 6 | 2 | 2 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 19 | 8 |
| | Females | 31 | 7 | ... | 2 | 2 | ... | 2 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 20 | 4 |
| 10 to 15 | Males | 110 | 13 | 4 | 3 | 2 | ... | ... | 1 | 1 | ... | 1 | ... | ... | ... | ... | 1 | 22 | 75 |
| | Females | 75 | 12 | 4 | 2 | 2 | ... | 3 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 7 | 56 |
| 15 to 20 | Males | 67 | 6 | ... | 1 | 1 | ... | 2 | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 9 | 52 |
| | Females | 58 | 7 | ... | 1 | 3 | ... | 1 | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 9 | 42 |
| 20 to 30 | Males | 75 | 17 | ... | ... | 3 | 2 | 3 | 3 | 2 | 2 | 1 | ... | ... | ... | ... | 1 | 28 | 30 |
| | Females | 61 | 13 | ... | 3 | 2 | ... | ... | 1 | 3 | 1 | ... | 1 | ... | 1 | ... | 1 | 25 | 23 |
| 30 to 40 | Males | 37 | 14 | 4 | ... | 2 | ... | ... | 1 | 1 | ... | 1 | 3 | ... | ... | 2 | ... | 16 | 7 |
| | Females | 29 | 8 | ... | ... | 2 | ... | ... | 1 | ... | ... | ... | 1 | 1 | ... | 1 | 2 | 18 | 3 |
| 40 to 50 | Males | 24 | 7 | 2 | 1 | 1 | ... | ... | 1 | 2 | ... | ... | ... | ... | ... | ... | ... | 14 | 3 |
| | Females | 27 | 4 | 1 | ... | ... | ... | 1 | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | 14 | 9 |
| 50 to 60 | Males | 17 | 4 | ... | 2 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 10 | 3 |
| | Females | 11 | 2 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | 7 | 2 |
| 60 to 70 | Males | 11 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 | 2 |
| | Females | 7 | 1 | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 6 | ... |
| 70 and over | Males | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... |
| | Females | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 | 1 |
| Unknown | Males | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| | Females | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 |
| All ages | Males | 378 | 68 | 13 | 9 | 10 | 2 | 6 | 8 | 6 | 3 | 3 | 3 | ... | ... | 3 | 2 | 128 | 182 |
| | Females | 311 | 54 | 5 | 8 | 11 | ... | 7 | 5 | 4 | 3 | ... | 4 | 1 | 1 | 2 | 3 | 113 | 144 |
| | Totals | 689 | 122 | 18 | 17 | 21 | 2 | 13 | 13 | 10 | 6 | 3 | 7 | 1 | 1 | 5 | 5 | 241 | 326 |

## TABLE XIV.

*Showing, by Sex, the Time of Affliction, in Years and Periods of Years, of the Deaf and Dumb Persons in Michigan, and the Time of Medical Treatment of those represented in each Period of Time of Affliction, with Totals for the State, for the year 1881.*

| Time Afflicted, in Years and Periods of Years. | Sex. | Total Number. | Number Treated. | Time of Treatment, in Years. | | | | | | | | | | | | | | No. Never Treated. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½. | ½ to 1. | 1 to 1½. | 1½ to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 and over. | Unknown. | | |
| 1 to 2 | Males | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Females | 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 |
| 2 to 3 | Males | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Females | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| 3 to 4 | Males | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Females | 4 | 1 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 2 |
| 4 to 5 | Males | 3 | 1 | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | 1 |
| | Females | 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2 | --- |
| 5 to 10 | Males | 89 | 16 | 6 | 4 | 2 | --- | --- | 2 | 1 | --- | --- | --- | --- | --- | --- | 1 | 29 | 44 |
| | Females | 62 | 17 | 1 | 4 | 5 | --- | 5 | 1 | 1 | --- | --- | --- | --- | --- | --- | --- | 19 | 26 |
| 10 to 15 | Males | 78 | 5 | --- | --- | 1 | 1 | 1 | --- | --- | --- | 1 | --- | --- | --- | --- | 1 | 15 | 58 |
| | Females | 50 | 4 | 2 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | 6 | 40 |
| 15 to 20 | Males | 51 | 6 | --- | 1 | 2 | --- | 1 | 1 | --- | 1 | --- | --- | --- | --- | --- | --- | 7 | 38 |
| | Females | 63 | 12 | --- | 2 | 2 | --- | --- | 2 | 3 | --- | --- | 2 | --- | 1 | --- | --- | 12 | 39 |
| 20 to 30 | Males | 70 | 18 | --- | 1 | 3 | 1 | 3 | 4 | 3 | 2 | 1 | --- | --- | --- | --- | --- | 27 | 25 |
| | Females | 47 | 9 | --- | 2 | 4 | --- | --- | --- | --- | 1 | --- | 1 | --- | --- | --- | 1 | 23 | 15 |
| 30 to 40 | Males | 36 | 14 | 5 | --- | 2 | --- | --- | --- | 2 | --- | 1 | 2 | --- | --- | 2 | --- | 16 | 6 |
| | Females | 28 | 6 | --- | --- | --- | --- | 1 | 1 | --- | --- | --- | 1 | --- | --- | 1 | 2 | 19 | 3 |
| 40 to 50 | Males | 18 | 3 | 1 | 1 | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | 12 | 3 |
| | Females | 27 | 4 | 1 | --- | --- | --- | --- | --- | --- | 2 | --- | --- | --- | --- | 1 | --- | 15 | 8 |
| 50 to 60 | Males | 15 | 4 | 1 | 1 | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | 1 | --- | 9 | 2 |
| | Females | 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 5 | 2 |
| 60 to 70 | Males | 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 | 1 |
| | Females | 6 | 1 | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | --- | --- | --- | --- | 5 | --- |
| 70 and over | Males | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- |
| | Females | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4 | 1 |
| Unknown | Males | 9 | 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1 | --- | --- | --- | --- | 4 | 4 |
| | Females | 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7 |
| All ages | Males | 378 | 68 | 13 | 9 | 10 | 2 | 6 | 8 | 6 | 3 | 3 | 3 | --- | --- | 3 | 2 | 128 | 182 |
| | Females | 311 | 54 | 5 | 8 | 11 | --- | 7 | 5 | 4 | 3 | --- | 4 | 1 | 1 | 2 | 3 | 113 | 144 |
| | Totals | 689 | 122 | 18 | 17 | 21 | 2 | 13 | 13 | 10 | 6 | 3 | 7 | 1 | 1 | 5 | 5 | 241 | 326 |

## TABLE XV.

*Showing, by Sex, the Total Number of Deaf and Dumb Persons in Michigan; the Total number who have been inmates of Institutions for the Deaf and Dumb, and the length of time they have been inmates; the number who have never been inmates of any institution, and the number of whom it is not reported whether they have been inmates of any institution; for the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of deaf and dumb persons | 689 | 378 | 311 |
| Total number who have been inmates of institutions | 447 | 245 | 202 |
| TIME IN YEARS, INMATES OF INSTITUTIONS. | | | |
| —½ | 11 | 5 | 6 |
| ½ to 1 | 6 | 5 | 1 |
| 1 to 1½ | 67 | 44 | 23 |
| 1½ to 2 | 3 | ..... | 3 |
| 2 to 3 | 60 | 33 | 27 |
| 3 to 4 | 54 | 23 | 31 |
| 4 to 5 | 42 | 24 | 18 |
| 5 to 6 | 41 | 23 | 18 |
| 6 to 7 | 40 | 24 | 16 |
| 7 to 8 | 54 | 26 | 28 |
| 8 to 9 | 47 | 28 | 19 |
| 9 to 10 | 9 | 2 | 7 |
| 10 and over | 9 | 4 | 5 |
| Unknown | 4 | 4 | ..... |
| Number who have never been inmates of any institution | 206 | 114 | 92 |
| Number of whom it is not reported whether they have been inmates of any institution | 36 | 19 | 17 |

## TABLE XVI.

*Showing, by Sex, the Nativity and Parent-nativity of the Deaf and Dumb Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| NATIVITY OF DEAF AND DUMB PERSONS.* | | | |
| All nativities | 689 | 378 | 311 |
| Native | 492 | 276 | 216 |
| Foreign | 136 | 74 | 62 |
| Unknown | 61 | 28 | 33 |
| NATIVITY OF PARENTS OF DEAF AND DUMB PERSONS.* | | | |
| All nativities | 689 | 378 | 311 |
| Both parents native | 219 | 127 | 92 |
| Both parents foreign | 247 | 133 | 114 |
| Foreign father and native mother | 25 | 14 | 11 |
| Foreign mother and native father | 17 | 10 | 7 |
| Unknown mother, father native | 5 | 2 | 3 |
| Unknown mother, father foreign | 11 | 4 | 7 |
| Unknown father, mother native | 3 | 2 | 1 |
| Unknown father, mother foreign | 7 | 3 | 4 |
| Both unknown | 155 | 83 | 72 |
| One or both native | 269 | 155 | 114 |
| One or both foreign | 307 | 164 | 143 |

* "Native" includes only those born in the United States.

## TABLE XVII.

*Showing the Estates and Incomes of the Deaf and Dumb Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of deaf and dumb persons | 689 | 378 | 311 |
| Total number who have estates | 57 | 39 | 18 |
| VALUE OF ESTATES. | | | |
| Under $500 | 12 | 8 | 4 |
| $500 to $1,000 | 8 | 7 | 1 |
| $1,000 to $2,000 | 23 | 13 | 10 |
| $2,000 to $5,000 | 11 | 9 | 2 |
| $5,000 and over | 1 | 1 | ..... |
| Unknown | 2 | 1 | 1 |
| Number who have no estates | 320 | 160 | 160 |
| Number whose estates, if any, are not reported | 312 | 179 | 133 |
| Total number who have incomes | 136 | 92 | 44 |
| VALUE OF INCOMES. | | | |
| Under $100 | 6 | 2 | 4 |
| $100 to $200 | 5 | 4 | 1 |
| $200 to $500 | 9 | 7 | 2 |
| $500 to $1,000 | 4 | 4 | ..... |
| $1,000 and over | 2 | 2 | ..... |
| Unknown | 110 | 73 | 37 |
| Number who have no incomes | 262 | 127 | 135 |
| Number whose incomes, if any, are not reported | 291 | 159 | 132 |

## TABLE XVIII.

*Estates and Incomes of the Relatives liable for the support of the Deaf and Dumb Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of deaf and dumb persons | 689 | 378 | 311 |
| Total number whose relatives have estates | 175 | 86 | 89 |
| VALUE OF ESTATES OF RELATIVES LIABLE FOR THE SUPPORT OF SUCH PERSONS. | | | |
| Under $500 | 20 | 12 | 8 |
| $500 to $1,000 | 25 | 13 | 12 |
| $1,000 to $2,000 | 40 | 19 | 21 |
| $2,000 to $5,000 | 55 | 27 | 28 |
| $5,000 and over | 28 | 12 | 16 |
| Unknown | 7 | 3 | 4 |
| Number whose relatives have no estates | 50 | 24 | 26 |
| Number who have relatives whose estates, if any, are not reported | 169 | 89 | 80 |
| Total number whose relatives have incomes | 82 | 36 | 46 |
| VALUE OF INCOME OF RELATIVES LIABLE FOR SUPPORT OF SUCH PERSONS. | | | |
| Under $100 | 3 | 1 | 2 |
| $100 to $200 | 7 | 4 | 3 |
| $200 to $500 | 32 | 13 | 19 |
| $500 to $1,000 | 17 | 9 | 8 |
| $1,000 and over | 9 | 5 | 4 |
| Unknown | 14 | 4 | 10 |
| Number whose relatives have no incomes | 53 | 28 | 25 |
| Number who have relatives whose incomes, if any, are not reported | 259 | 135 | 124 |
| Number who have no relatives liable for their support | 233 | 142 | 91 |
| Number whose relatives liable for their support, if any, are not reported | 62 | 37 | 25 |

## TABLE XIX.

*Showing, for the Deaf and Dumb Persons in Michigan, the Assigned Causes of Malady, and, by Sex, the Number Deaf and Dumb from each Cause.*

| CAUSES OF MALADY. | Males. | Females. | CAUSES OF MALADY. | Males. | Females. |
|---|---|---|---|---|---|
| Congenital | 133 | 113 | Congestion of brain | 2 | ---- |
| Hereditary | 1 | 2 | Dropsy of brain | ---- | 1 |
| From infancy | 3 | 1 | Inflammation of brain | 1 | 3 |
| Sickness in infancy | 2 | 1 | Inflammation | 6 | 10 |
| Teething | 3 | ---- | Congestion | 1 | ---- |
| Mumps in childhood | ---- | 1 | Congestive chills | 1 | ---- |
| Measles in childhood | 1 | 1 | Sickness | 16 | 13 |
| Scarlet fever in childhood | 1 | ---- | Measles | 7 | 11 |
| Brain fever in childhood | 1 | ---- | Measles and fits | 1 | ---- |
| Fever in childhood | ---- | 1 | Measles and whooping-cough | ---- | 1 |
| Fits and fever in childhood | ---- | 1 | Whooping-cough | 6 | 4 |
| Taking cold in childhood | ---- | 1 | Mumps | 1 | ---- |
| Severe cold | 5 | 3 | Diphtheria | 1 | 3 |
| Catarrh | 1 | ---- | Small-pox | ---- | 1 |
| Gathering in head | 3 | 2 | Fever | 8 | 7 |
| Gathering in head, and croup | 1 | ---- | Scarlet fever | 51 | 33 |
| Gathering in head, and worm fits | 1 | ---- | Typhoid fever | 13 | 12 |
| Scarlet fever, and gathering in head | ---- | 1 | Lung fever | ---- | 1 |
| Ulcer in head | ---- | 1 | Rheumatic fever | 3 | ---- |
| Ulcer in ear | 1 | 1 | Petechial fever | ---- | 1 |
| Inflammation of the ear from taking cold | ---- | 1 | Fever and measles | ---- | 1 |
| Ear disease | ---- | 1 | Dropsy | 2 | 1 |
| Ear disease and toothache | 1 | ---- | Scrofula | 1 | 1 |
| Swelling under right ear | 2 | ---- | Apoplexy | ---- | 1 |
| Swelling in throat | 1 | ---- | Epileptic fits and paralysis | 1 | ---- |
| Boils | 1 | ---- | Fits | 1 | 2 |
| Canker in mouth | ---- | 1 | Spasms | 3 | 1 |
| Paralysis | 1 | 1 | Cramp | 2 | ---- |
| Cerebro-spinal meningitis | 1 | 3 | Quinine | ---- | 1 |
| Spinal meningitis | 1 | 2 | Mal-practice | ---- | 1 |
| Spotted fever | 9 | 5 | Drinking lye | 1 | ---- |
| Spinal fever | 28 | 18 | Sun-stroke | 1 | ---- |
| Spinal disease | 1 | 1 | Lightning and sickness | ---- | 1 |
| Brain fever | 24 | 16 | Falling | 3 | 4 |
| Nervous fever | ---- | 1 | Run over by stage, injuring head | 1 | ---- |
| Brain and typhoid fever | ---- | 1 | Parental abuse | 1 | ---- |
| | | | Over-work | ---- | 1 |
| | | | Unassigned | 16 | 14 |
| Totals | | | | 378 | 311 |

## TABLE XX.

*Showing the Occupations of the Deaf and Dumb Persons in Michigan, and, by Sex, the number engaged in each Occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Artists | 2 | ---- | House-workers | ---- | 22 |
| Bank-tellers and manufacturers of clothes-wringers | 1 | ---- | Laborers | 26 | 2 |
| Blacksmiths' sons and daughters | 1 | 2 | Laborers' sons | 4 | ---- |
| Boiler-makers | 1 | ---- | Liverymen's daughters | ---- | 1 |
| Cabinet-makers | 6 | ---- | Loafers | 1 | ---- |
| Cabinet-makers and farmers | 1 | ---- | Marble-cutters | 1 | ---- |
| Carpenters | 4 | ---- | Masons' sons | 1 | ---- |
| Carpenters' daughters | ---- | 1 | Mechanics' sons | 1 | ---- |
| Chair-bottomers | 1 | ---- | Milliners | ---- | 1 |
| Children | 34 | 30 | Mine laborers | 1 | ---- |
| Dressmakers | ---- | 1 | Miners' sons | 1 | ---- |
| Domestics | ---- | 7 | No occupation | 20 | 31 |
| Employés on railroad | 1 | ---- | Not reported | 3 | 8 |
| Farmers | 69 | 2 | Painters' sons | 1 | ---- |
| Farmers' wives | ---- | 2 | Peddlers | 1 | ---- |
| Farmers' sons and daughters | 17 | 29 | Printers | 3 | ---- |
| Farmers and carpenters | 1 | ---- | Pupils | 139 | 112 |
| Farm laborers | 8 | ---- | Seamstresses | ---- | 3 |
| Furniture dealers | 1 | ---- | Section hands on railroads | 1 | ---- |
| Girls' supervisors | ---- | 1 | Shoemakers | 11 | ---- |
| Gunsmiths | 1 | ---- | Stave-cutters | 1 | ---- |
| Head sawyers | 1 | ---- | Students | 1 | ---- |
| Helpers | 1 | ---- | Tailors | 1 | ---- |
| Hoop-makers | 1 | ---- | Tailors' sons | 1 | ---- |
| Hotel keepers' sons and daughters | 1 | 1 | Teachers | 3 | ---- |
| Housekeepers | ---- | 55 | Teamsters | 1 | ---- |
| | | | Truss-makers | 1 | ---- |
| | | | Wagon-makers | 1 | ---- |
| Totals | | | | 378 | 311 |

## TABLE XXI.

*Showing, for the State and Counties, by Sex, the Number of Blind Persons in Michi-*
*for the*

| Number. | State, Counties, and School. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | State | Totals | 540 | 510 | 5 | ---- | 18 | 7 | 180 | 241 | 111 | 4 | 4 |
| | | Males | 325 | 306 | 4 | ---- | 11 | 4 | 107 | 169 | 44 | 2 | 3 |
| | | Females | 215 | 204 | 1 | ---- | 7 | 3 | 73 | 72 | 67 | 2 | 1 |
| 2 | Allegan | Males | 6 | 6 | ---- | ---- | ---- | ---- | 2 | 4 | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| 3 | Antrim | Males | 2 | 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| 4 | Baraga | Males | 1 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 5 | Barry | Males | 6 | 6 | ---- | ---- | ---- | ---- | 1 | 4 | 1 | ---- | ---- |
| | | Females | 4 | 4 | ---- | ---- | ---- | ---- | 1 | ---- | 3 | ---- | ---- |
| 6 | Bay | Males | 3 | 3 | ---- | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 7 | Benzie | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| 8 | Berrien | Males | 7 | 7 | ---- | ---- | ---- | ---- | 2 | 4 | 1 | ---- | ---- |
| | | Females | 6 | 6 | ---- | ---- | ---- | ---- | 1 | 3 | 2 | ---- | ---- |
| 9 | Branch | Males | 5 | 5 | ---- | ---- | ---- | ---- | 3 | 2 | ---- | ---- | ---- |
| | | Females | 9 | 9 | ---- | ---- | ---- | ---- | 1 | 5 | 3 | ---- | ---- |
| 10 | Calhoun | Males | 16 | 16 | ---- | ---- | ---- | ---- | 8 | 7 | 1 | ---- | ---- |
| | | Females | 8 | 8 | ---- | ---- | ---- | ---- | 2 | 2 | 4 | ---- | ---- |
| 11 | Cass | Males | 4 | 3 | 1 | ---- | ---- | ---- | ---- | 2 | 2 | ---- | ---- |
| | | Females | 3 | 3 | ---- | ---- | ---- | ---- | 1 | 1 | 1 | ---- | ---- |
| 12 | Charlevoix | Males | 4 | 4 | ---- | ---- | ---- | ---- | 1 | 3 | ---- | ---- | ---- |
| | | Females | 1 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | ---- |
| 13 | Chippewa | Males | 3 | ---- | ---- | ---- | 3 | ---- | 1 | 2 | ---- | ---- | ---- |
| | | Females | 2 | 1 | ---- | ---- | 1 | ---- | 2 | ---- | ---- | ---- | ---- |
| 14 | Clare | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| 15 | Clinton | Males | 5 | 5 | ---- | ---- | ---- | ---- | 1 | 4 | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- |

## TABLE XXI.

*gan, their Color, Conjugal and Mental Condition, Health, Habits, and How Supported, year 1881.*

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uniformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| 486 | 14 | 28 | 12 | 393 | 99 | 23 | 25 | 478 | 16 | 4 | 28 | 14 | 437 | 18 | 74 | 11 | |
| 292 | 11 | 14 | 8 | 249 | 42 | 15 | 19 | 285 | 14 | 2 | 19 | 5 | 253 | 13 | 54 | 5 | 1 |
| 194 | 3 | 14 | 4 | 144 | 57 | 8 | 6 | 193 | 2 | 2 | 9 | 9 | 184 | 5 | 20 | 6 | |
| 6 | ---- | ---- | ---- | 5 | 1 | ---- | ---- | 6 | ---- | ---- | ---- | ---- | 6 | ---- | ---- | ---- | 2 |
| 2 | ---- | ---- | ---- | 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 3 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 4 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 6 | ---- | ---- | ---- | 5 | ---- | 1 | ---- | 6 | ---- | ---- | ---- | ---- | 5 | ---- | 1 | ---- | 5 |
| 4 | ---- | ---- | ---- | 3 | ---- | 1 | ---- | 3 | ---- | ---- | ---- | 1 | 2 | 1 | 1 | ---- | |
| 1 | ---- | 1 | 1 | 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 6 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 7 |
| 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | |
| 6 | 1 | ---- | ---- | 4 | 1 | 1 | 1 | 6 | ---- | ---- | 1 | ---- | 4 | 2 | 1 | ---- | 8 |
| 6 | ---- | ---- | ---- | 4 | 2 | ---- | ---- | 6 | ---- | ---- | ---- | ---- | 3 | ---- | 3 | ---- | |
| 4 | 1 | ---- | ---- | 4 | ---- | 1 | ---- | 2 | 2 | ---- | 1 | ---- | 5 | ---- | ---- | ---- | 9 |
| 9 | ---- | ---- | ---- | 5 | 2 | 1 | 1 | 9 | ---- | ---- | ---- | ---- | 9 | ---- | ---- | ---- | |
| 15 | 1 | ---- | ---- | 14 | ---- | 2 | ---- | 15 | 1 | ---- | ---- | ---- | 12 | ---- | 4 | ---- | 10 |
| 8 | ---- | ---- | ---- | 5 | 2 | ---- | 1 | 8 | ---- | ---- | ---- | ---- | 7 | ---- | 1 | ---- | |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 11 |
| 3 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | 1 | |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 3 | ---- | ---- | 1 | ---- | 4 | ---- | ---- | ---- | 12 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | |
| 3 | ---- | ---- | ---- | 2 | 1 | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 2 | ---- | 1 | ---- | 13 |
| 2 | ---- | ---- | ---- | 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 14 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 5 | ---- | ---- | ---- | 1 | 2 | 1 | 1 | 5 | ---- | ---- | ---- | ---- | 4 | ---- | 1 | ---- | 15 |
| 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | 1 | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- | |

TABLE XXI.—CONTINUED.

| Number. | Counties and School. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Crawford | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2 | Eaton | Males | 9 | 8 | ---- | ---- | ---- | 1 | 4 | 5 | ---- | ---- | ---- |
| | | Females | 5 | 5 | ---- | ---- | ---- | ---- | 3 | 1 | ---- | 1 | ---- |
| 3 | Emmet | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | 4 | 1 | ---- | ---- | 3 | ---- | 3 | 1 | ---- | ---- | ---- |
| 4 | Genesee | Males | 7 | 7 | ---- | ---- | ---- | ---- | 3 | 3 | 1 | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- |
| 5 | Grand Traverse | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| 6 | Gratiot | Males | 4 | 4 | ---- | ---- | ---- | ---- | 1 | 2 | 1 | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- |
| 7 | Hillsdale | Males | 8 | 7 | 1 | ---- | ---- | ---- | 3 | 3 | 2 | ---- | ---- |
| | | Females | 8 | 8 | ---- | ---- | ---- | ---- | 2 | 3 | 3 | ---- | ---- |
| 8 | Houghton | Males | 11 | 9 | ---- | ---- | ---- | 2 | ---- | 11 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 9 | Huron | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- |
| 10 | Ingham[1] | Males | 9 | 8 | ---- | ---- | ---- | 1 | 2 | 3 | 4 | ---- | ---- |
| | | Females | 8 | 8 | ---- | ---- | ---- | ---- | ---- | 5 | 3 | ---- | ---- |
| 11 | Ionia | Males | 6 | 6 | ---- | ---- | ---- | ---- | 1 | 3 | 2 | ---- | ---- |
| | | Females | 10 | 10 | ---- | ---- | ---- | ---- | 2 | 2 | 6 | ---- | ---- |
| 12 | Iosco | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 13 | Isabella | Males | 5 | 4 | ---- | ---- | 1 | ---- | 1 | 4 | ---- | ---- | ---- |
| | | Females | 2 | 1 | ---- | ---- | 1 | ---- | 1 | ---- | 1 | ---- | ---- |
| 14 | Jackson | Males | 9 | 9 | ---- | ---- | ---- | ---- | ---- | 4 | 2 | 1 | 2 |
| | | Females | 3 | 3 | ---- | ---- | ---- | ---- | 2 | ---- | 1 | ---- | ---- |
| 15 | Kalamazoo | Males | 4 | 4 | ---- | ---- | ---- | ---- | 1 | 2 | 1 | ---- | ---- |
| | | Females | 5 | 4 | ---- | ---- | ---- | 1 | 3 | ---- | 1 | ---- | 1 |
| 16 | Kalkaska | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| 17 | Kent | Males | 13 | 12 | 1 | ---- | ---- | ---- | 3 | 10 | ---- | ---- | ---- |
| | | Females | 4 | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | ---- |
| 18 | Keweenaw | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

[1] Exclusive of pupils in the Michigan School for the Blind. See "School for the Blind," at the end of this table.

TABLE XXI.—CONTINUED.

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uniformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 8 | ---- | ---- | 1 | 5 | 1 | 1 | 2 | 7 | ---- | ---- | 2 | ---- | 7 | ---- | 1 | 1 | 2 |
| 5 | ---- | ---- | ---- | 3 | 1 | ---- | 1 | 5 | ---- | ---- | ---- | ---- | 5 | ---- | ---- | ---- | |
| ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 3 |
| 2 | 1 | ---- | 1 | 3 | 1 | ---- | ---- | 3 | ---- | ---- | 1 | ---- | 4 | ---- | ---- | ---- | |
| 7 | ---- | ---- | ---- | 7 | ---- | ---- | ---- | 7 | ---- | ---- | ---- | ---- | 5 | ---- | 2 | ---- | 4 |
| 1 | 1 | ---- | ---- | 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 5 |
| 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 4 | ---- | ---- | ---- | 2 | 1 | 1 | ---- | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 6 |
| 2 | ---- | ---- | ---- | 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 7 | ---- | 1 | ---- | 7 | ---- | 1 | ---- | 8 | ---- | ---- | ---- | ---- | 6 | ---- | 2 | ---- | 7 |
| 6 | ---- | 2 | ---- | 6 | 2 | ---- | ---- | 7 | ---- | 1 | ---- | ---- | 7 | ---- | 1 | ---- | |
| 11 | ---- | ---- | ---- | 9 | ---- | 2 | ---- | 11 | ---- | ---- | ---- | ---- | 7 | 2 | 2 | ---- | 8 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 9 |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | 2 | ---- | ---- | ---- | |
| 9 | ---- | ---- | ---- | 6 | 2 | ---- | 1 | 9 | ---- | ---- | ---- | ---- | 8 | ---- | 1 | ---- | 10 |
| 6 | 1 | ---- | 1 | 3 | 5 | ---- | ---- | 8 | ---- | ---- | ---- | ---- | 7 | ---- | 1 | ---- | |
| 6 | ---- | ---- | ---- | 5 | 1 | ---- | ---- | 6 | ---- | ---- | ---- | ---- | 6 | ---- | ---- | ---- | 11 |
| 9 | ---- | 1 | ---- | 7 | 3 | ---- | ---- | 10 | ---- | ---- | ---- | ---- | 10 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 12 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 5 | ---- | ---- | ---- | 1 | 3 | ---- | 1 | 5 | ---- | ---- | ---- | ---- | 3 | ---- | 2 | ---- | 13 |
| 2 | ---- | ---- | ---- | 1 | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 1 | 2 | ---- | ---- | ---- | |
| 7 | 1 | 1 | ---- | 7 | 1 | ---- | 1 | 6 | 3 | ---- | ---- | ---- | 4 | ---- | 5 | ---- | 14 |
| 3 | ---- | ---- | ---- | 2 | ---- | ---- | 1 | 2 | ---- | ---- | 1 | ---- | 3 | ---- | ---- | ---- | |
| 3 | ---- | 1 | ---- | 2 | 1 | ---- | 1 | 2 | 1 | ---- | ---- | 1 | 3 | ---- | 1 | ---- | 15 |
| 4 | ---- | ---- | 1 | 3 | 1 | ---- | 1 | 3 | 1 | ---- | ---- | 1 | 3 | ---- | 1 | 1 | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 16 |
| ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | |
| 12 | 1 | ---- | ---- | 11 | 2 | ---- | ---- | 13 | ---- | ---- | ---- | ---- | 9 | ---- | 3 | 1 | 17 |
| 4 | ---- | ---- | ---- | 3 | 1 | ---- | ---- | 1 | ---- | ---- | 3 | ---- | 4 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 18 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |

TABLE XXI.—CONTINUED.

| Number. | Counties and School. | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Lake | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 2 | Lapeer | Males | 5 | 5 | ---- | ---- | ---- | ---- | 1 | 2 | 2 | ---- | ---- |
| | | Females | 4 | 4 | ---- | ---- | ---- | ---- | ---- | 2 | 2 | ---- | ---- |
| 3 | Leelanaw | Males | 1 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | 3 | 3 | ---- | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- |
| 4 | Lenawee | Males | 8 | 8 | ---- | ---- | ---- | ---- | ---- | 6 | 1 | 1 | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 1 | 5 | 1 | ---- | ---- |
| 5 | Livingston | Males | 6 | 6 | ---- | ---- | ---- | ---- | 2 | 3 | 1 | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- |
| 6 | Mackinac | Males | 3 | ---- | ---- | ---- | 3 | ---- | 1 | 2 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 7 | Macomb | Males | 12 | 12 | ---- | ---- | ---- | ---- | 3 | 6 | 3 | ---- | ---- |
| | | Females | 7 | 7 | ---- | ---- | ---- | ---- | 2 | 2 | 3 | ---- | ---- |
| 8 | Manistee | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 9 | Manitou | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- |
| 10 | Marquette | Males | 7 | 7 | ---- | ---- | ---- | ---- | 2 | 4 | 1 | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 11 | Mason | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- |
| 12 | Mecosta | Males | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | 1 | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- |
| 13 | Menominee | Males | 1 | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 14 | Missaukee | Males | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 15 | Monroe | Males | 10 | 9 | 1 | ---- | ---- | ---- | 6 | 3 | 1 | ---- | ---- |
| | | Females | 5 | 5 | ---- | ---- | ---- | ---- | ---- | 3 | 2 | ---- | ---- |
| 16 | Montcalm | Males | 9 | 9 | ---- | ---- | ---- | ---- | 3 | 4 | 2 | ---- | ---- |
| | | Females | 2 | 2 | ---- | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- |
| 17 | Muskegon | Males | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | Females | 1 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- |
| 18 | Newaygo | Males | 1 | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- |
| | | Females | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

TABLE XXI.—CONTINUED.

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uninformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | NUMBER. |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 4 | ---- | ---- | 1 | 2 | 1 | 1 | 1 | 3 | 1 | ---- | ---- | 1 | 2 | 1 | 2 | ---- | 2 |
| 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | 4 | ---- | ---- | ---- | ---- | 4 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 3 |
| 3 | ---- | ---- | ---- | 1 | 1 | 1 | ---- | 3 | ---- | ---- | ---- | ---- | 3 | ---- | ---- | ---- | |
| 7 | ---- | 1 | ---- | 5 | 3 | ---- | ---- | 5 | 2 | 1 | ---- | ---- | 4 | 1 | 3 | ---- | 4 |
| 6 | ---- | 1 | ---- | 5 | 2 | ---- | ---- | 7 | ---- | ---- | ---- | ---- | 6 | ---- | 1 | ---- | |
| 5 | ---- | ---- | 1 | 4 | 1 | ---- | 1 | 6 | ---- | ---- | ---- | ---- | 6 | ---- | ---- | ---- | 5 |
| 2 | ---- | ---- | ---- | 1 | 1 | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | ---- | |
| 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | 3 | ---- | ---- | ---- | ---- | 2 | ---- | 1 | ---- | 6 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 9 | 1 | 2 | ---- | 7 | 3 | ---- | 2 | 10 | ---- | 1 | ---- | 1 | 10 | ---- | 2 | ---- | 7 |
| 7 | ---- | ---- | ---- | 5 | 1 | 1 | ---- | 6 | ---- | ---- | 1 | ---- | 7 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 8 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 9 |
| 2 | ---- | ---- | ---- | ---- | 2 | ---- | ---- | 1 | ---- | ---- | ---- | 1 | 1 | ---- | 1 | ---- | |
| 5 | ---- | ---- | 2 | 7 | ---- | ---- | ---- | 6 | ---- | ---- | 1 | ---- | 6 | 1 | ---- | ---- | 10 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 11 |
| 1 | ---- | 1 | ---- | 1 | ---- | 1 | ---- | 2 | ---- | ---- | ---- | ---- | 1 | 1 | ---- | ---- | |
| 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 12 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | |
| 1 | ---- | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | 1 | ---- | ---- | ---- | 13 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | 2 | ---- | ---- | ---- | ---- | 1 | ---- | 1 | ---- | 14 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 8 | ---- | 1 | 1 | 9 | 1 | ---- | ---- | 10 | ---- | ---- | ---- | ---- | 9 | ---- | 1 | ---- | 15 |
| 5 | ---- | ---- | ---- | 4 | 1 | ---- | ---- | 4 | ---- | ---- | ---- | 1 | 5 | ---- | ---- | ---- | |
| 8 | ---- | 1 | ---- | 7 | 2 | ---- | ---- | 6 | 2 | ---- | 1 | ---- | 7 | ---- | 1 | 1 | 16 |
| 1 | ---- | 1 | ---- | 1 | 1 | ---- | ---- | 1 | ---- | ---- | ---- | 1 | 1 | ---- | ---- | 1 | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 17 |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1 | |
| 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | 1 | ---- | ---- | ---- | ---- | ---- | 1 | ---- | ---- | 18 |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |

TABLE XXI.—CONTINUED.

| Number. | Counties | Sex. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| 1 | Oakland | Males | 15 | 15 | .... | .... | .... | .... | 5 | 8 | 2 | .... | .... |
| | | Females | 7 | 7 | .... | .... | .... | .... | 1 | 5 | 1 | .... | .... |
| 2 | Oceana | Males | 2 | 2 | .... | .... | .... | .... | 1 | 1 | .... | .... | .... |
| | | Females | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 3 | Ontonagon | Males | 2 | 2 | .... | .... | .... | .... | 1 | 1 | .... | .... | .... |
| | | Females | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| 4 | Ottawa | Males | 8 | 7 | .... | .... | 1 | .... | 3 | 5 | .... | .... | .... |
| | | Females | 7 | 7 | .... | .... | .... | .... | 2 | 3 | 2 | .... | .... |
| 5 | Saginaw | Males | 9 | 9 | .... | .... | .... | .... | 4 | 5 | .... | .... | .... |
| | | Females | 8 | 8 | .... | .... | .... | .... | 4 | 3 | 1 | .... | .... |
| 6 | Sanilac | Males | 7 | 7 | .... | .... | .... | .... | 1 | 4 | 2 | .... | .... |
| | | Females | 5 | 4 | .... | .... | .... | 1 | 3 | 2 | .... | .... | .... |
| 7 | Shiawassee | Males | 1 | 1 | .... | .... | .... | .... | .... | .... | 1 | .... | .... |
| | | Females | 2 | 2 | .... | .... | .... | .... | .... | 1 | 1 | .... | .... |
| 8 | St. Clair | Males | 8 | 8 | .... | .... | .... | .... | 2 | 3 | 3 | .... | .... |
| | | Females | 11 | 10 | .... | .... | 1 | .... | 1 | 2 | 8 | .... | .... |
| 9 | St. Joseph | Males | 4 | 4 | .... | .... | .... | .... | 3 | .... | 1 | .... | .... |
| | | Females | 9 | 9 | .... | .... | .... | .... | 4 | 3 | 2 | .... | .... |
| 10 | Tuscola | Males | 2 | 2 | .... | .... | .... | .... | .... | 1 | 1 | .... | .... |
| | | Females | 6 | 6 | .... | .... | .... | .... | 1 | 1 | 4 | .... | .... |
| 11 | Van Buren | Males | 7 | 7 | .... | .... | .... | .... | 1 | 4 | 2 | .... | .... |
| | | Females | 3 | 2 | 1 | .... | .... | .... | 1 | 2 | .... | .... | .... |
| 12 | Washtenaw | Males | 7 | 7 | .... | .... | .... | .... | 2 | 4 | 1 | .... | .... |
| | | Females | 5 | 5 | .... | .... | .... | .... | 3 | 1 | 1 | .... | .... |
| 13 | Wayne | Males | 10 | 10 | .... | .... | .... | .... | 1 | 8 | .... | .... | 1 |
| | | Females | 5 | 5 | .... | .... | .... | .... | 3 | 2 | .... | .... | .... |
| 14 | School for the Blind | Males | 22 | 22 | .... | .... | .... | .... | 22 | .... | .... | .... | .... |
| | | Females | 14 | 14 | .... | .... | .... | .... | 14 | .... | .... | .... | .... |

TABLE XXI.—CONTINUED.

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Uninformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. | Number. |
| 10 | 1 | 4 | .... | 9 | 5 | 1 | .... | 15 | .... | .... | .... | .... | 15 | .... | .... | .... | 1 |
| 7 | .... | .... | .... | 3 | 4 | .... | .... | 7 | .... | .... | .... | .... | 6 | .... | .... | 1 | |
| 2 | .... | .... | .... | 2 | .... | .... | .... | 1 | .... | .... | 1 | .... | 2 | .... | .... | .... | 2 |
| .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | |
| 2 | .... | .... | .... | 2 | .... | .... | .... | 1 | .... | .... | 1 | .... | 1 | .... | 1 | .... | 3 |
| .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | |
| 7 | .... | .... | 1 | 4 | 2 | .... | 2 | 6 | .... | .... | 2 | .... | 5 | .... | 3 | .... | 4 |
| 7 | .... | .... | .... | 6 | 1 | .... | .... | 6 | .... | .... | .... | 1 | 7 | .... | .... | .... | |
| 9 | .... | .... | .... | 7 | 1 | .... | 1 | 7 | .... | .... | 1 | 1 | 6 | .... | 2 | 1 | 5 |
| 7 | .... | 1 | .... | 7 | 1 | .... | .... | 8 | .... | .... | .... | .... | 6 | 1 | .... | 1 | |
| 7 | .... | .... | .... | 7 | .... | .... | .... | 6 | .... | .... | 1 | .... | 6 | 1 | .... | .... | 6 |
| 5 | .... | .... | .... | 3 | 2 | .... | .... | 5 | .... | .... | .... | .... | 4 | .... | 1 | .... | |
| 1 | .... | .... | .... | 1 | .... | .... | .... | 1 | .... | .... | .... | .... | 1 | .... | .... | .... | 7 |
| 2 | .... | .... | .... | 1 | 1 | .... | .... | 2 | .... | .... | .... | .... | 2 | .... | .... | .... | |
| 7 | 1 | .... | .... | 7 | 1 | .... | .... | 6 | .... | .... | 1 | 1 | 6 | 2 | .... | .... | 8 |
| 7 | .... | 4 | .... | 7 | 4 | .... | .... | 10 | .... | .... | .... | 1 | 10 | .... | 1 | .... | |
| 3 | 1 | .... | .... | 2 | .... | .... | 2 | 3 | .... | .... | 1 | .... | 2 | .... | 1 | 1 | 9 |
| 9 | .... | .... | .... | 5 | 2 | 1 | 1 | 9 | .... | .... | .... | .... | 8 | .... | 1 | .... | |
| 2 | .... | .... | .... | 2 | .... | .... | .... | 2 | .... | .... | .... | .... | 2 | .... | .... | .... | 10 |
| 6 | .... | .... | .... | 3 | 2 | 1 | .... | 6 | .... | .... | .... | .... | 5 | .... | 1 | .... | |
| 7 | .... | .... | .... | 6 | 1 | .... | .... | 7 | .... | .... | .... | .... | 7 | .... | .... | .... | 11 |
| 2 | .... | 1 | .... | 2 | 1 | .... | .... | 2 | 1 | .... | .... | .... | 3 | .... | .... | .... | |
| 6 | 1 | .... | .... | 5 | 2 | .... | .... | 7 | .... | .... | .... | .... | 7 | .... | .... | .... | 12 |
| 3 | .... | 1 | 1 | 5 | .... | .... | .... | 5 | .... | .... | .... | .... | 4 | .... | 1 | .... | |
| 10 | .... | .... | .... | 8 | 1 | .... | 1 | 9 | 1 | .... | .... | .... | 6 | 1 | 3 | .... | 13 |
| 5 | .... | .... | .... | 4 | 1 | .... | .... | 3 | .... | .... | 2 | .... | 3 | 1 | 1 | .... | |
| 22 | .... | .... | .... | 22 | .... | .... | .... | 19 | .... | .... | 3 | .... | 17 | .... | 5 | .... | 14 |
| 14 | .... | .... | .... | 14 | .... | .... | .... | 14 | .... | .... | .... | .... | 12 | .... | 2 | .... | |

## TABLE XXII.

*Showing, by Sex, the Ages of the Blind Persons in Michigan, Classified in Years and Periods of Years, and the time in Years and Periods of Years those represented in Each Period of Age have been so Afflicted, with Totals for the State, for the year 1881.*

| Ages in Years and Periods of Years. | Sex. | Total Number. | Time Afflicted, in Years and Periods of Years. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | —½. | ½ to 1. | 1 to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 10. | 10 to 15. | 15 to 20. | 20 to 30. | 30 to 40. | 40 to 50. | 50 to 60. | 60 to 70. | 70 and over. | Unknown. | Life. |
| 1 to 2 | Males | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Females | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| 2 to 3 | Males | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Females | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| 3 to 4 | Males | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Females | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4 to 5 | Males | 2 | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| | Females | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 5 to 10 | Males | 7 | ... | ... | ... | ... | ... | ... | 7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| | Females | 6 | ... | ... | ... | ... | ... | ... | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| 10 to 15 | Males | 20 | ... | ... | ... | 1 | 2 | ... | 5 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| | Females | 9 | ... | ... | ... | ... | 3 | 1 | 2 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| 15 to 20 | Males | 10 | ... | ... | 1 | ... | ... | 1 | ... | 3 | 4 | ... | ... | ... | ... | ... | ... | 1 | 2 |
| | Females | 10 | ... | ... | ... | 1 | ... | ... | 3 | 1 | 5 | ... | ... | ... | ... | ... | ... | ... | 4 |
| 20 to 30 | Males | 25 | 1 | 3 | ... | 1 | ... | ... | 2 | 6 | 6 | 6 | ... | ... | ... | ... | ... | ... | 1 |
| | Females | 23 | ... | ... | ... | ... | ... | 1 | 3 | 4 | 5 | 9 | ... | ... | ... | ... | ... | 1 | 5 |
| 30 to 40 | Males | 27 | ... | 1 | 2 | 2 | ... | 1 | 6 | 4 | 5 | 2 | 4 | ... | ... | ... | ... | ... | 1 |
| | Females | 18 | ... | ... | ... | ... | ... | 1 | 4 | 2 | 2 | 4 | 5 | ... | ... | ... | ... | ... | 2 |
| 40 to 50 | Males | 38 | ... | ... | 1 | 1 | 1 | 1 | 7 | 9 | 8 | 3 | 2 | 5 | ... | ... | ... | ... | 2 |
| | Females | 18 | ... | ... | ... | 1 | ... | 1 | 4 | 3 | 1 | 3 | 2 | 2 | ... | ... | ... | 1 | 1 |
| 50 to 60 | Males | 51 | 1 | 1 | ... | 2 | 1 | 4 | 3 | 10 | 10 | 10 | 5 | 1 | 2 | ... | ... | 1 | 1 |
| | Females | 27 | ... | ... | 1 | ... | 1 | ... | 6 | 7 | ... | 4 | 4 | 3 | 1 | ... | ... | ... | 1 |
| 60 to 70 | Males | 50 | ... | ... | ... | 2 | 1 | 3 | 11 | 10 | 5 | 12 | 2 | 2 | 1 | ... | ... | 1 | ... |
| | Females | 35 | ... | ... | ... | 2 | ... | 4 | 12 | 4 | 3 | 3 | 4 | ... | 2 | ... | ... | 1 | ... |
| 70 and over | Males | 91 | 1 | ... | 2 | 7 | 2 | 7 | 22 | 16 | 13 | 6 | 2 | 5 | 1 | ... | 2 | 5 | 1 |
| | Females | 64 | ... | ... | 1 | 1 | 2 | 1 | 29 | 9 | 8 | 8 | 3 | 1 | ... | 1 | ... | ... | ... |
| Unknown | Males | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | ... |
| | Females | 3 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... |
| All ages | Males | 325 | 3 | 5 | 7 | 16 | 8 | 18 | 63 | 70 | 51 | 39 | 15 | 13 | 4 | ... | 2 | 11 | 17 |
| | Females | 215 | ... | ... | 3 | 6 | 6 | 9 | 70 | 33 | 24 | 31 | 18 | 6 | 3 | 1 | ... | 5 | 20 |
| | Totals | 540 | 3 | 5 | 10 | 22 | 14 | 27 | 133 | 103 | 75 | 70 | 33 | 19 | 7 | 1 | 2 | 16 | 37 |

## TABLE XXIII.

*Showing, by Sex, the Ages of the Blind Persons in Michigan, Classified in Years and Periods of Years, and the Time in Years those represented in each Period of Age have been under Medical Treatment, with Totals for the State, for the year 1881.*

| Ages in Years and Periods of Years. | Sex. | Total Number. | Number Treated. | Time of Treatment, in Years. | | | | | | | | | | | | | | No. Never Treated. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½ | ½ to 1. | 1 to 1½. | 1½ to 2 | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 and over. | Unknown. | | |
| 1 to 2 | Males | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| | Females | 1 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| 2 to 3 | Males | 1 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| | Females | 1 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| 3 to 4 | Males | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| | Females | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| 4 to 5 | Males | 2 | 1 | --- | --- | 1 | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | 1 |
| | Females | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| 5 to 10 | Males | 7 | 4 | 2 | --- | 1 | --- | --- | -- | -- | 1 | -- | -- | -- | -- | -- | -- | 3 | --- |
| | Females | 6 | 2 | 1 | --- | --- | --- | --- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | 4 | --- |
| 10 to 15 | Males | 20 | 7 | 1 | --- | 1 | --- | 2 | 3 | -- | -- | -- | -- | -- | -- | -- | -- | 5 | 8 |
| | Females | 9 | 4 | --- | --- | 1 | --- | 1 | -- | 1 | 1 | -- | -- | -- | -- | -- | -- | 1 | 4 |
| 15 to 20 | Males | 10 | 1 | --- | --- | --- | 1 | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 8 |
| | Females | 10 | 4 | --- | --- | 2 | --- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 4 |
| 20 to 30 | Males | 25 | 13 | 1 | 5 | 1 | --- | 1 | 2 | 1 | -- | -- | -- | -- | -- | 1 | 1 | 5 | 7 |
| | Females | 23 | 10 | 1 | --- | 1 | --- | 1 | 2 | 1 | 1 | -- | 1 | -- | -- | 2 | -- | 5 | 8 |
| 30 to 40 | Males | 27 | 23 | 6 | 3 | 5 | --- | 4 | 2 | 2 | -- | -- | -- | -- | -- | 1 | -- | 3 | 1 |
| | Females | 18 | 13 | 1 | 2 | 1 | --- | 2 | -- | 1 | 1 | 1 | -- | 1 | -- | 3 | -- | 4 | 1 |
| 40 to 50 | Males | 38 | 28 | 3 | 3 | 4 | --- | 8 | 2 | 4 | 2 | -- | -- | -- | -- | 2 | -- | 8 | 2 |
| | Females | 18 | 6 | 3 | 1 | 1 | --- | --- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | 8 | 4 |
| 50 to 60 | Males | 51 | 35 | 5 | 6 | 7 | --- | 4 | 4 | 3 | 3 | -- | 1 | -- | -- | 1 | 1 | 9 | 7 |
| | Females | 27 | 16 | 4 | 1 | 2 | --- | 3 | 3 | 1 | -- | -- | -- | -- | -- | 2 | -- | 7 | 4 |
| 60 to 70 | Males | 50 | 32 | 5 | 2 | 4 | --- | 6 | 1 | 5 | 1 | 1 | -- | -- | 1 | 4 | 2 | 13 | 5 |
| | Females | 35 | 20 | 1 | 1 | 5 | --- | 5 | 2 | -- | -- | -- | 1 | -- | -- | 3 | 2 | 11 | 4 |
| 70 and over | Males | 91 | 42 | 5 | 6 | 5 | --- | 11 | 6 | 2 | 2 | -- | -- | -- | -- | 5 | -- | 35 | 14 |
| | Females | 64 | 36 | 7 | 2 | 6 | 1 | 4 | 4 | 3 | 2 | 1 | 2 | -- | 1 | 2 | 1 | 22 | 6 |
| Unknown | Males | 3 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | 3 |
| | Females | 3 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 2 |
| All ages | Males | 325 | 186 | 28 | 25 | 29 | 1 | 36 | 20 | 17 | 9 | 1 | 1 | -- | 1 | 14 | 4 | 83 | 56 |
| | Females | 215 | 111 | 18 | 7 | 19 | 1 | 18 | 13 | 7 | 5 | 2 | 4 | 1 | 1 | 12 | 3 | 67 | 37 |
| | Totals | 540 | 297 | 46 | 32 | 48 | 2 | 54 | 33 | 24 | 14 | 3 | 5 | 1 | 2 | 26 | 7 | 150 | 93 |

## TABLE XXIV.

*Showing, by Sex, the Time of Affliction, in Years and Periods of Years, of the Blind Persons in Michigan, and the Time of Medical Treatment of those represented in each Period of Time of Affliction, with Totals for the State, for the year 1881.*

| Time afflicted, in years and periods of years. | Sex. | Total Number. | Number Treated. | Time of Treatment, in Years. | | | | | | | | | | | | | | No. Never Treated. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½. | ½ to 1. | 1 to 1½. | 1½ to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 and over. | Unknown. | | |
| —½ | Males | 3 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 1 |
| | Females | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| ½ to 1 | Males | 5 | 5 | 2 | 2 | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- | --- |
| | Females | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| 1 to 2 | Males | 7 | 3 | 1 | --- | 2 | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 1 |
| | Females | 3 | 2 | 1 | 1 | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| 2 to 3 | Males | 16 | 10 | 1 | 1 | 3 | --- | 5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 3 |
| | Females | 6 | 4 | 1 | -- | 2 | --- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | --- |
| 3 to 4 | Males | 8 | 2 | --- | --- | --- | --- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 3 |
| | Females | 6 | 2 | --- | --- | 1 | --- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 1 |
| 4 to 5 | Males | 18 | 9 | 1 | --- | 4 | --- | 2 | 1 | -- | -- | 1 | -- | -- | -- | -- | -- | 7 | 2 |
| | Females | 9 | 6 | 1 | 1 | 1 | --- | 1 | 1 | 1 | -- | -- | -- | -- | -- | -- | -- | 2 | 1 |
| 5 to 10 | Males | 63 | 43 | 13 | 7 | 3 | --- | 10 | 4 | 2 | 4 | -- | -- | -- | -- | -- | -- | 15 | 5 |
| | Females | 70 | 34 | 5 | 2 | 6 | --- | 3 | 6 | 3 | 1 | 2 | 2 | -- | 1 | 1 | 2 | 28 | 8 |
| 10 to 15 | Males | 70 | 34 | 5 | 5 | 7 | --- | 4 | 4 | 6 | -- | -- | -- | -- | -- | 2 | 1 | 20 | 16 |
| | Females | 33 | 19 | 5 | 1 | 4 | --- | 1 | 3 | -- | 1 | -- | 1 | 1 | -- | 2 | -- | 7 | 7 |
| 15 to 20 | Males | 51 | 35 | 1 | 6 | 4 | 1 | 4 | 4 | 7 | 3 | -- | -- | -- | -- | 4 | 1 | 9 | 7 |
| | Females | 24 | 12 | 1 | --- | 2 | --- | 2 | 1 | 1 | 1 | -- | 1 | -- | -- | 3 | -- | 7 | 5 |
| 20 to 30 | Males | 39 | 26 | 2 | 2 | 3 | --- | 3 | 5 | 1 | 1 | -- | 1 | -- | -- | 7 | 1 | 6 | 7 |
| | Females | 31 | 15 | 1 | 2 | 1 | --- | 5 | 1 | 1 | 2 | -- | -- | -- | -- | 2 | -- | 9 | 7 |
| 30 to 40 | Males | 15 | 11 | 1 | 2 | 2 | --- | 2 | 1 | -- | 1 | -- | -- | -- | 1 | 1 | -- | 3 | 1 |
| | Females | 18 | 11 | 2 | --- | 1 | 1 | 4 | -- | -- | -- | -- | -- | -- | -- | 3 | -- | 5 | 2 |
| 40 to 50 | Males | 13 | 5 | -- | --- | 1 | --- | 2 | 1 | 1 | -- | -- | -- | -- | -- | -- | -- | 5 | 3 |
| | Females | 6 | 4 | 1 | --- | 1 | --- | --- | -- | 1 | -- | -- | -- | -- | -- | 1 | -- | 2 | --- |
| 50 to 60 | Males | 4 | 2 | 1 | --- | --- | --- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 | --- |
| | Females | 3 | 2 | --- | --- | --- | --- | --- | 1 | -- | -- | -- | -- | -- | -- | -- | 1 | 1 | --- |
| 60 to 70 | Males | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| | Females | 1 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | 1 |
| 70 and over | Males | 2 | 1 | --- | --- | --- | --- | 1 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 | --- |
| | Females | --- | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | --- |
| Unknown | Males | 11 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 7 |
| | Females | 5 | --- | --- | --- | --- | --- | --- | -- | -- | -- | -- | -- | -- | -- | -- | -- | --- | 5 |
| All ages | Males | 325 | 186 | 28 | 25 | 29 | 1 | 36 | 20 | 17 | 9 | 1 | 1 | -- | 1 | 14 | 4 | 83 | 56 |
| | Females | 215 | 111 | 18 | 7 | 19 | 1 | 18 | 13 | 7 | 5 | 2 | 4 | 1 | 1 | 12 | 3 | 67 | 37 |
| | Totals | 540 | 297 | 46 | 32 | 48 | 2 | 54 | 33 | 24 | 14 | 3 | 5 | 1 | 2 | 26 | 7 | 150 | 93 |

## TABLE XXV.

*Showing, by Sex, the Total Number of Blind Persons in Michigan; the total number who have been inmates of Institutions for the Blind, and the length of time they have been inmates; the number who have never been inmates of any institution, and the number of whom it is not reported whether they have been inmates of any institution; for the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of blind persons | 540 | 325 | 215 |
| Total number who have been inmates of institutions | 90 | 56 | 34 |
| TIME IN YEARS, INMATES OF INSTITUTIONS. | | | |
| —½ | 10 | 7 | 3 |
| ½ to 1 | 6 | 4 | 2 |
| 1 to 1½ | 10 | 7 | 3 |
| 1½ to 2 | ..... | ..... | ..... |
| 2 to 3 | 6 | 4 | 2 |
| 3 to 4 | 10 | 8 | 2 |
| 4 to 5 | 8 | 6 | 2 |
| 5 to 6 | 10 | 8 | 2 |
| 6 to 7 | 5 | 1 | 4 |
| 7 to 8 | 3 | 1 | 2 |
| 8 to 9 | 18 | 9 | 9 |
| 9 to 10 | 1 | ..... | 1 |
| 10 and over | 2 | ... | 2 |
| Unknown | 1 | 1 | ..... |
| Number who have never been inmates of any institution | 382 | 227 | 155 |
| Number of whom it is not reported whether they have been inmates of any institution | 68 | 42 | 26 |

## TABLE XXVI.

*Showing, by Sex, the Nativity and Parent-nativity of the Blind Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| **NATIVITY OF BLIND PERSONS.*** | | | |
| All nativities | 540 | 325 | 215 |
| Native | 372 | 212 | 160 |
| Foreign | 138 | 94 | 44 |
| Unknown | 30 | 19 | 11 |
| **NATIVITY OF PARENTS OF BLIND PERSONS.*** | | | |
| All nativities | 540 | 325 | 215 |
| Both parents native | 235 | 140 | 95 |
| Both parents foreign | 158 | 102 | 56 |
| Foreign father and native mother | 16 | 10 | 6 |
| Foreign mother and native father | 10 | 7 | 3 |
| Unknown mother, father native | 5 | 4 | 1 |
| Unknown mother, father foreign | 2 | 1 | 1 |
| Unknown father, mother native | 8 | 1 | 7 |
| Unknown father, mother foreign | 4 | 2 | 2 |
| Both unknown | 102 | 58 | 44 |
| One or both native | 274 | 162 | 112 |
| One or both foreign | 190 | 122 | 68 |

* "Native" includes only those born in the United States.

## TABLE XXVII.

*Showing the Estates and Incomes of the Blind Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of blind persons | 540 | 325 | 215 |
| Total number who have estates | 161 | 109 | 52 |
| VALUE OF ESTATES. | | | |
| Under $500 | 31 | 22 | 9 |
| $500 to $1,000 | 26 | 16 | 10 |
| $1,000 to $2,000 | 37 | 24 | 13 |
| $2,000 to $5,000 | 38 | 22 | 16 |
| $5,000 and over | 24 | 23 | 1 |
| Unknown | 5 | 2 | 3 |
| Number who have no estates | 253 | 152 | 101 |
| Number whose estates, if any, are not reported | 126 | 64 | 62 |
| Total number who have incomes | 198 | 133 | 65 |
| VALUE OF INCOMES. | | | |
| Under $100 | 25 | 9 | 16 |
| $100 to $200 | 15 | 10 | 5 |
| $200 to $500 | 25 | 19 | 6 |
| $500 to $1,000 | 17 | 16 | 1 |
| $1,000 and over | 7 | 7 | ..... |
| Unknown | 109 | 72 | 37 |
| Number who have no incomes | 243 | 140 | 103 |
| Number whose incomes, if any, are not reported | 99 | 52 | 47 |

## TABLE XXVIII.

*Estates and Incomes of the Relatives liable for the support of the Blind Persons in Michigan in the year 1881.*

| | Totals. | Males. | Females. |
|---|---|---|---|
| Total number of blind persons | 540 | 325 | 215 |
| Total number whose relatives have estates | 127 | 62 | 65 |
| VALUE OF ESTATES OF RELATIVES LIABLE FOR THE SUPPORT OF SUCH PERSONS. | | | |
| Under $500 | 10 | 5 | 5 |
| $500 to $1,000 | 20 | 8 | 12 |
| $1,000 to $2,000 | 28 | 10 | 18 |
| $2,000 to $5,000 | 43 | 25 | 18 |
| $5,000 and over | 22 | 13 | 9 |
| Unknown | 4 | 1 | 3 |
| Number whose relatives have no estates | 62 | 38 | 24 |
| Number who have relatives whose estates, if any, are not reported | 42 | 22 | 20 |
| Total number whose relatives have incomes | 58 | 28 | 30 |
| VALUE OF INCOME OF RELATIVES LIABLE FOR SUPPORT OF SUCH PERSONS. | | | |
| Under $100 | 2 | ..... | 2 |
| $100 to $200 | 10 | 3 | 7 |
| $200 to $500 | 19 | 10 | 9 |
| $500 to $1,000 | 11 | 6 | 5 |
| $1,000 and over | 3 | 3 | ..... |
| Unknown | 13 | 6 | 7 |
| Number whose relatives have no incomes | 59 | 37 | 22 |
| Number who have relatives whose incomes, if any, are not reported | 114 | 57 | 57 |
| Number who have no relatives liable for their support | 249 | 170 | 79 |
| Number whose relatives liable for their support, if any, are not reported | 60 | 33 | 27 |

## TABLE XXIX.

*Showing, for the Blind Persons in Michigan, the Assigned Causes of Malady, and, by Sex, the Number Blind from each Cause.*

| CAUSES. | Males. | Females. | CAUSES. | Males. | Females. |
|---|---|---|---|---|---|
| Congenital | 14 | 16 | Scarlet fever | 8 | 3 |
| Hereditary | 4 | 2 | Typhoid fever | 1 | 2 |
| Hereditary and sickness | .... | 1 | Teething and fever | .... | 1 |
| Old age | 13 | 11 | Cholera morbus | .... | 1 |
| Old age and erysipelas | .... | 1 | Gravel | 1 | .... |
| Amaurosis | 1 | 3 | Debility in infancy | 1 | .... |
| Atrophy of optic nerve caused by cold | 2 | .... | Heart disease | .... | 1 |
| Failing of optic nerve | .... | 2 | Rheumatism | 1 | .... |
| Disease of optic nerve | 1 | 3 | Inflammatory and sciatic rheumatism | 1 | .... |
| Paralysis of optic nerve | 7 | 3 | Erysipelas | 5 | 6 |
| Paralysis | 3 | 3 | Scrofula | 4 | 8 |
| Cataract | 24 | 21 | Salt-rheum and catarrh | .... | 1 |
| Inflammation and cataract | 1 | .... | Sickness and inflammation | 1 | .... |
| Glaucoma | 1 | .... | Sickness | 2 | 3 |
| Film grew over the sight | .... | 1 | Suppression of menses | .... | 1 |
| Granulation and inflammation | 5 | 3 | Accident | 4 | 1 |
| Inflammation | 63 | 33 | Accident by shooting | 3 | .... |
| Inflammation and bad treatm't | 2 | .... | Accident—both eyes shot out | 1 | .... |
| Ophthalmia | 3 | 1 | Accident with scissors | 1 | .... |
| Sore eyes | 2 | .... | Accident in mine | 10 | .... |
| Sore eyes—scrofula | .... | 1 | Blasting in mine | 4 | .... |
| Ulceration in eyes | .... | 1 | Premature explosion in copper mine | 1 | .... |
| Staphyloma | 1 | .... | Explosion of powder in mine | 2 | .... |
| Wild hairs | .... | 1 | Explosion of powder | 3 | .... |
| Sore eyes caused by using towel used by person having syphilis | 1 | .... | Explosion of steam engine | 1 | .... |
| Venereal disease | 1 | .... | Explosion of glycerine | 1 | .... |
| Gonorrhea | 1 | .... | Injured by blasting rocks | 1 | .... |
| Syphilis—whiskey | 1 | .... | Firing a cannon | 1 | .... |
| Intemperance | 3 | .... | Wounded in army | 1 | .... |
| Epilepsy | 1 | .... | Gunshot wound | 2 | .... |
| Fits | 1 | 1 | Exposure and gunshot wound | 1 | .... |
| Dropsy of brain | 1 | .... | Premature discharge of cannon | 1 | .... |
| Hydrocephalus | 1 | .... | Explosion of gun-cap | .... | 1 |
| Brain fever | 4 | .... | Right eye by flash of powder, left eye by a knot hitting it | 1 | .... |
| Brain fever and belladonna | .... | 1 | Pieces of iron thrown from gun | 1 | .... |
| Pain in head | .... | 1 | Fall, breaking nerve of eye | .... | 1 |
| Neuralgia | 3 | 11 | Hot lime slopped in eye | 1 | .... |
| Inflammation of head | .... | 1 | Playing with lime | 1 | .... |
| Disease of spine | 1 | .... | Hot tallow flew into eyes | .... | 1 |
| Swelling in head | 1 | .... | Injured by steam | 1 | .... |
| Diphtheria | .... | 1 | Injured by potash | 1 | .... |
| Small-pox | 6 | .... | Coal from fire | .... | 1 |
| Chicken-pox | .... | 1 | Hit by a nail | .... | 1 |
| Measles | 1 | 3 | Running nail in eye | 1 | .... |
| Measles and catarrh | .... | 1 | One eye destroyed by piece of steel, the other by erysipelas | 1 | .... |
| Fever | .... | 1 | | | |

TABLE XXIX.—CONTINUED.

| CAUSES. | Males. | Females. | CAUSES. | Males. | Females. |
|---|---|---|---|---|---|
| Particles from steel pick | 1 | .... | Cold | 1 | 6 |
| Piece of stone flew into eye | 1 | .... | Exposure | 4 | 1 |
| One eye poisoned, the other hurt by a chip | .... | 1 | Over-work | 2 | 3 |
| Struck by chip, followed by inflammation | .... | 1 | Over-work in sun | 1 | .... |
| Splinter of wood | 1 | .... | Over-work and over-heating | 1 | .... |
| Untying shoe with fork, it struck the eye | 1 | .... | Over-work and headache | .... | 1 |
| Blow from crank | 1 | .... | Strain | 1 | .... |
| Injury | 2 | .... | Lifting | 2 | .... |
| Injury and inflammation | 1 | .... | Hard study | 1 | .... |
| Injury to head | 2 | .... | Exercise of eyes in school | .... | 1 |
| Kick of horse | 1 | .... | Reading at night | 1 | .... |
| Log rolled over him | 1 | .... | Sewing by lamp without chimney | .... | 1 |
| Blow from falling timber | .... | 1 | Lead poisoning and inflammation | 1 | .... |
| Spine injured by fall | 2 | .... | Painting | 1 | .... |
| Stroke of lightning | 1 | .... | Taking medicine in childhood | .... | 1 |
| Sun in face | 1 | .... | Vaccination causing inflammation | .... | 1 |
| Mal-treatment | 1 | 1 | Working in tobacco plants | 1 | .... |
| Mal-practice | 3 | .... | Spasms of crying in childhood | .... | 1 |
| Army service | 1 | .... | Parents related | 1 | .... |
| Bathing when over-heated | 1 | .... | Unassigned | 40 | 33 |
| Totals | | | | 325 | 215 |

## TABLE XXX.

*Showing the Occupations of the Blind Persons in Michigan, and, by Sex, the number engaged in each Occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Basket-makers | 2 | .... | Lumber dealers' daughters | .... | 1 |
| Bead-workers | .... | 2 | Masons | 1 | .... |
| Blacksmiths | 2 | .... | Mechanics | 1 | .... |
| Blacksmiths previous to blindness—now laborers | 1 | .... | Mechanics previous to blindness | 1 | .... |
| Boarding-house keepers | 1 | 1 | Medicine peddlers | 1 | .... |
| Braiders | .... | 1 | Merchants | 1 | .... |
| Brewers | 1 | .... | Merchants previous to blindness | 1 | .... |
| Broom-makers | 4 | .... | Mill men | 1 | .... |
| Cabinet-makers' sons | 1 | .... | Miners | 11 | .... |
| Carpenters | 3 | .... | Ministers | 1 | .... |
| Carpenters and joiners formerly | 1 | .... | Ministers' sons | 1 | .... |
| Carpenters previous to blindness—no occupation now | 2 | .... | Money-loaners | 1 | .... |
| Carriage-makers' sons | 1 | .... | Musical instrument dealers | 1 | .... |
| Children | 14 | 8 | Musicians | 2 | .... |
| Chorers | 2 | .... | Music teachers | 6 | 2 |
| Cigar-dealers | 1 | .... | No occupation | 31 | 32 |
| Clock-repairers | 1 | .... | Not reported | 22 | 17 |
| Contractors' daughters | .... | 1 | Painters | 1 | .... |
| Coopers | 1 | .... | Painters previous to blindness | 1 | .... |
| Coopers previous to blindness—now peddlers | 1 | .... | Peanut-venders | 1 | .... |
| Distillers previous to blindness | 1 | .... | Peddlers | 8 | .... |
| Domestics | .... | 1 | Physicians' daughters | .... | 2 |
| Farmers | 115 | 11 | Pop-corn peddlers | 1 | .... |
| Farmers previous to blindness | 5 | .... | Pupils | .... | 1 |
| Farmers' sons and daughters | 4 | 6 | Railroad employés previous to blindness | 1 | .... |
| Farmers' wives | .... | 11 | Railroad engineers | 1 | .... |
| Farm laborers | 3 | .... | Restaurant keepers | 1 | .... |
| Farm laborers previous to blindness | 1 | .... | Sailors | 2 | .... |
| Fishermen | 1 | .... | Saloon-keepers | 4 | .... |
| Gunsmiths | 1 | .... | Sawyers | 1 | .... |
| Housewives | .... | 88 | Seamstresses | .... | 1 |
| Housewives previous to blindness | .... | 10 | Ship-carpenters | 1 | .... |
| House-workers | .... | 8 | Shoemakers | 3 | .... |
| Hunters | 1 | .... | Soldiers | 1 | .... |
| Hunters and beggars | 1 | .... | Soldiers formerly | 1 | .... |
| Knitters | .... | 2 | Stone-masons | 2 | .... |
| Knitters and seamstresses | .... | 1 | Students | 1 | .... |
| Laborers | 23 | 2 | Tailors | 1 | 1 |
| Laborers' sons and daughters | 4 | 3 | Teamsters' sons | 1 | .... |
| Lawyers | 1 | .... | Violinists | 1 | .... |
| | | | Wagon-makers | 1 | .... |
| | | | Weavers | 1 | 2 |
| | | | Willow-ware makers | 2 | .... |
| | | | Wood-sawyers | 4 | .... |
| Totals | | | | 325 | 215 |

## TABLE XXXI.

*Showing for the State, by Totals and by Sex, the Number of Idiotic, Epileptic, Partially and Mental Condition, Health, Habits.*

| CLASSES. | SEX. | Number. | Color. | | | | | Conjugal Condition. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | White. | Black. | Mulatto. | Indian. | Unknown. | Single. | Married. | Widowed. | Divorced. | Unknown. |
| Idiotic | Totals | 469 | 460 | 1 | 3 | 1 | 4 | 451 | 10 | 4 | .... | 4 |
| | Males | 267 | 261 | 1 | 2 | 1 | 2 | 263 | 2 | .... | .... | 2 |
| | Females | 202 | 199 | .... | 1 | .... | 2 | 188 | 8 | 4 | .... | 2 |
| Epileptic | Totals | 306 | 301 | 1 | 1 | 2 | 1 | 240 | 54 | 10 | 1 | 1 |
| | Males | 194 | 190 | 1 | 1 | 1 | 1 | 160 | 31 | 2 | .... | 1 |
| | Females | 112 | 111 | .... | .... | 1 | .... | 80 | 23 | 8 | 1 | ... |
| Partially deaf and dumb | Totals | 87 | 85 | .... | 1 | 1 | .... | 63 | 20 | 4 | .... | .... |
| | Males | 52 | 51 | .... | .... | 1 | .... | 37 | 12 | 3 | .... | .... |
| | Females | 35 | 34 | .... | 1 | .... | .... | 26 | 8 | 1 | .... | .... |
| Dumb | Totals | 48 | 47 | .... | 1 | .... | .... | 46 | 1 | .... | .... | 1 |
| | Males | 27 | 26 | .... | 1 | .... | .... | 25 | 1 | .... | .... | 1 |
| | Females | 21 | 21 | .... | .... | .... | .... | 21 | .... | .... | .... | .... |
| Partially blind | Totals | 89 | 86 | 1 | .... | 2 | .... | 45 | 34 | 10 | .... | .... |
| | Males | 56 | 54 | .... | .... | 2 | .... | 28 | 23 | 5 | .... | .... |
| | Females | 33 | 32 | 1 | .... | .... | .... | 17 | 11 | 5 | .... | .... |

## TABLE XXXI.

*Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan, their Color, Conjugal and How Supported, for the year 1881.*

| Mental Condition. | | | | Health. | | | | Habits. | | | | | How Supported. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intelligent. | Idiotic. | Average. | Unknown. | Good. | Poor. | Average. | Unknown. | Good. | Bad. | Average. | Unformed. | Unknown. | By Themselves or Friends. | By the Public in part. | By the Public. | Unknown. |
| ..... | 469 | ..... | ..... | 340 | 73 | 25 | 31 | 291 | 41 | 9 | 65 | 63 | 266 | 13 | 184 | 6 |
| ..... | 267 | ..... | ..... | 195 | 43 | 13 | 16 | 164 | 23 | 7 | 40 | 33 | 153 | 9 | 101 | 4 |
| ..... | 202 | ..... | ..... | 145 | 30 | 12 | 15 | 127 | 18 | 2 | 25 | 30 | 113 | 4 | 83 | 2 |
| 137 | 69 | 77 | 23 | 165 | 103 | 28 | 12 | 201 | 16 | 3 | 26 | 60 | 213 | 6 | 85 | 2 |
| 89 | 48 | 43 | 14 | 109 | 55 | 20 | 10 | 116 | 14 | 3 | 17 | 44 | 129 | 2 | 61 | 2 |
| 48 | 21 | 34 | 9 | 54 | 48 | 8 | 2 | 85 | 2 | .... | 9 | 16 | 84 | 4 | 24 | .... |
| 85 | ..... | 1 | 1 | 79 | 3 | 4 | 1 | 72 | 1 | .... | 13 | 1 | 73 | .... | 12 | 2 |
| 51 | ..... | ..... | 1 | 45 | 3 | 3 | 1 | 45 | 1 | .... | 6 | .... | 43 | .... | 8 | 1 |
| 34 | ..... | 1 | ..... | 34 | .... | 1 | .... | 27 | .... | .... | 7 | 1 | 30 | .... | 4 | 1 |
| 15 | 22 | 6 | 5 | 34 | 5 | 5 | 4 | 25 | 5 | 1 | 13 | 4 | 33 | 5 | 9 | 1 |
| 8 | 13 | 4 | 2 | 20 | 2 | 2 | 3 | 13 | 3 | .... | 9 | 2 | 19 | 2 | 6 | .... |
| 7 | 9 | 2 | 3 | 14 | 3 | 3 | 1 | 12 | 2 | 1 | 4 | 2 | 14 | 3 | 3 | 1 |
| 83 | 1 | 3 | 2 | 66 | 11 | 5 | 7 | 84 | 1 | .... | 2 | 2 | 76 | 1 | 10 | 2 |
| 52 | ..... | 2 | 2 | 42 | 7 | 2 | 5 | 51 | 1 | .... | 2 | 2 | 46 | .... | 8 | 2 |
| 31 | 1 | 1 | ..... | 24 | 4 | 3 | 2 | 33 | .... | .... | .... | .... | 30 | 1 | 2 | .... |

## TABLE XXXII.

*Showing, by Totals and by Sex, the Ages of the Idiotic, Epileptic, Partially Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan, for the year 1881.*

| Classes. | Sex. | Total Number. | Ages in Years and Periods of Years. | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| Idiotic | Totals | [illegible] | .. | .. | .. | .. | 1 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | Males | [illegible] | .. | .. | .. | .. | 1 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| | Females | [illegible] | .. | .. | .. | .. | .. | .. | 7 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 4 | [illegible] | [illegible] |
| Epileptic | Totals | [illegible] | .. | .. | 1 | .. | .. | .. | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .. |
| | Males | 194 | .. | .. | .. | .. | .. | .. | 8 | 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 3 | [illegible] | .. |
| | Females | 112 | .. | .. | 1 | .. | .. | .. | 3 | 8 | [illegible] | 33 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .. |
| Partially deaf and dumb | Totals | 87 | .. | .. | .. | .. | .. | 1 | 6 | [illegible] | [illegible] | [illegible] | 13 | 3 | [illegible] | [illegible] | 4 | .. |
| | Males | 52 | .. | .. | .. | .. | .. | 1 | 3 | 5 | [illegible] | [illegible] | 9 | [illegible] | [illegible] | [illegible] | 3 | .. |
| | Females | 35 | .. | .. | .. | .. | .. | .. | 3 | 6 | 9 | 9 | 4 | [illegible] | .. | [illegible] | [illegible] | .. |
| Dumb | Totals | 48 | .. | .. | .. | 1 | .. | 2 | 4 | [illegible] | 12 | 8 | 6 | [illegible] | [illegible] | [illegible] | .. | .. |
| | Males | 27 | .. | .. | .. | 1 | .. | 2 | 1 | 8 | 6 | 6 | 2 | .. | .. | 1 | .. | .. |
| | Females | 21 | .. | .. | .. | .. | .. | .. | 3 | [illegible] | 6 | 2 | 4 | 1 | [illegible] | .. | .. | .. |
| Partially blind | Totals | 89 | .. | .. | .. | .. | .. | .. | 1 | 8 | 15 | 10 | 9 | [illegible] | [illegible] | 8 | [illegible] | [illegible] |
| | Males | 56 | .. | .. | .. | .. | .. | .. | 1 | 6 | 6 | 5 | 8 | 8 | 6 | 6 | 8 | [illegible] |
| | Females | 32 | .. | .. | .. | .. | .. | .. | .. | 2 | 9 | 5 | 1 | 4 | 6 | 2 | 4 | .. |

## TABLE XXXIII.

*Showing, by Totals and by Sex, the Time in years and periods of years, the Idiotic, Epileptic, Partially Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan have been so afflicted; for the year 1881.*

| CLASSES. | SEX. | Total Number. | TIME AFFLICTED, IN YEARS AND PERIODS OF YEARS. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | —½. | ½ to 1. | 1 to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 10. | 10 to 15. | 15 to 20. | 20 to 30. | 30 to 40. | 40 to 50. | 50 to 60. | 60 to 70. | 70 and over. | Unknown. | Life. |
| Idiotic | Totals | 469 | .. | .. | .. | 2 | 3 | 4 | 46 | 60 | 71 | 129 | 64 | 39 | 18 | 5 | 1 | 27 | 338 |
| | Males | 267 | .. | .. | .. | 1 | 3 | 3 | 28 | 34 | 41 | 66 | 31 | 27 | 12 | 2 | 1 | 18 | 204 |
| | Females | 202 | .. | .. | .. | 1 | .. | 1 | 18 | 26 | 30 | 63 | 33 | 12 | 6 | 3 | .. | 9 | 134 |
| Epileptic | Totals | 306 | .. | 1 | 5 | 4 | 9 | 12 | 56 | 56 | 48 | 57 | 18 | 12 | 2 | 1 | .. | 25 | 41 |
| | Males | 194 | .. | .. | 3 | 3 | 1 | 9 | 35 | 37 | 34 | 38 | 11 | 5 | 1 | 1 | .. | 16 | 27 |
| | Females | 112 | .. | 1 | 2 | 1 | 8 | 3 | 21 | 19 | 14 | 19 | 7 | 7 | 1 | .. | .. | 9 | 14 |
| Partially deaf and dumb | Totals | 87 | 1 | .. | .. | 1 | .. | 1 | 24 | 17 | 6 | 16 | 9 | 3 | 2 | 1 | 4 | 2 | 15 |
| | Males | 52 | 1 | .. | .. | .. | .. | 1 | 14 | 9 | 4 | 9 | 6 | 2 | 1 | 1 | 3 | 1 | 10 |
| | Females | 35 | .. | .. | .. | 1 | .. | .. | 10 | 8 | 2 | 7 | 3 | 1 | 1 | .. | 1 | 1 | 5 |
| Dumb | Totals | 48 | .. | .. | .. | 1 | .. | 2 | 8 | 8 | 13 | 6 | 6 | 1 | 2 | .. | .. | 1 | 35 |
| | Males | 27 | .. | .. | .. | 1 | .. | 2 | 4 | 5 | 7 | 5 | 2 | .. | .. | .. | .. | 1 | 18 |
| | Females | 21 | .. | .. | .. | .. | .. | .. | 4 | 3 | 6 | 1 | 4 | 1 | 2 | .. | .. | .. | 17 |
| Partially blind | Totals | 89 | .. | 1 | 1 | 1 | 4 | 3 | 15 | 17 | 26 | 11 | 4 | 1 | 1 | .. | .. | 4 | 14 |
| | Males | 56 | .. | 1 | 1 | .. | 3 | 2 | 7 | 12 | 14 | 10 | 4 | .. | .. | .. | .. | 2 | 7 |
| | Females | 33 | .. | .. | .. | 1 | 1 | 1 | 8 | 5 | 12 | 1 | .. | 1 | 1 | .. | .. | 2 | 7 |

## TABLE XXXIV.

*Showing, by Totals and by Sex, the number of Idiotic, Epileptic, Partially Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan who have received Medical Treatment, and the Time in years such treatment has continued; for the year 1881.*

| CLASSES. | SEX. | Total Number. | Number Treated. | TIME OF TREATMENT, IN YEARS. | | | | | | | | | | | | | | No. Never Treated. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½. | ½ to 1. | 1 to 1½. | 1½ to 2. | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 and over. | Unknown. | | |
| Idiotic | Totals | 469 | 110 | 7 | 5 | 24 | 2 | 17 | 12 | 4 | 9 | 9 | .. | 1 | 3 | 14 | 3 | 272 | 87 |
| | Males | 267 | 61 | 5 | 4 | 12 | 2 | 11 | 7 | 3 | 3 | 3 | .. | .. | 3 | 8 | .. | 151 | 55 |
| | Females | 202 | 49 | 2 | 1 | 12 | .. | 6 | 5 | 1 | 6 | 6 | .. | 1 | .. | 6 | 3 | 121 | 32 |
| Epileptic | Totals | 306 | 196 | 9 | 11 | 8 | 5 | 24 | 19 | 13 | 19 | 7 | 7 | 7 | 2 | 48 | 17 | 66 | 44 |
| | Males | 194 | 124 | 7 | 6 | 6 | 3 | 18 | 12 | 9 | 12 | 5 | 5 | 4 | 1 | 27 | 9 | 44 | 26 |
| | Females | 112 | 72 | 2 | 5 | 2 | 2 | 6 | 7 | 4 | 7 | 2 | 2 | 3 | 1 | 21 | 8 | 22 | 18 |
| Partially deaf and dumb | Totals | 87 | 25 | 4 | 4 | 4 | .. | 2 | 1 | 1 | 1 | .. | .. | 1 | .. | 4 | 3 | 27 | 35 |
| | Males | 52 | 18 | 2 | 3 | 2 | .. | 2 | 1 | 1 | 1 | .. | .. | 1 | .. | 3 | 2 | 15 | 19 |
| | Females | 35 | 7 | 2 | 1 | 2 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1 | 1 | 12 | 16 |
| Dumb | Totals | 48 | 12 | 4 | 3 | .. | .. | 1 | 2 | .. | .. | .. | .. | .. | .. | .. | 2 | 31 | 5 |
| | Males | 27 | 6 | 2 | 1 | .. | .. | 1 | 1 | .. | .. | .. | .. | .. | .. | .. | 1 | 19 | 2 |
| | Females | 21 | 6 | 2 | 2 | .. | .. | .. | 1 | .. | .. | .. | .. | .. | .. | .. | 1 | 12 | 3 |
| Partially blind | Totals | 89 | 46 | 12 | 5 | 5 | 2 | 2 | 3 | 3 | 3 | 2 | .. | .. | .. | 5 | 4 | 16 | 27 |
| | Males | 56 | 27 | 5 | 3 | 3 | 2 | 2 | .. | 3 | 1 | 2 | .. | .. | .. | 3 | 3 | 12 | 17 |
| | Females | 33 | 19 | 7 | 2 | 2 | .. | .. | 3 | .. | 2 | .. | .. | .. | .. | 2 | 1 | 4 | 10 |

## TABLE XXXV.

*Showing, for the State, the Total Number and the Number of each Sex of the Idiotic, Epileptic, Partially Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan; the total number of each class who have been inmates of institutions for their care and education, and the length of time they have been inmates; the number who have never been inmates of any institution, and the number of whom it is not reported whether they have been inmates of any institution; for the year 1881.*

| CLASSES. | SEX. | Total Number. | Total number who have been inmates of public institutions. | Time, in Years, Inmates of Public Institutions. | | | | | | | | | | | | | | Number who have never been inmates of any institution. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | —½. | ½ to 1. | 1 to 1½. | 1½ to 2 | 2 to 3. | 3 to 4. | 4 to 5. | 5 to 6. | 6 to 7. | 7 to 8. | 8 to 9. | 9 to 10. | 10 and over. | Unknown. | | |
| Idiotic | Totals | 469 | 32 | 4 | 5 | 2 | 3 | 4 | 1 | 1 | 1 | 4 | .. | .. | 1 | 1 | 5 | 310 | 127 |
| | Males | 267 | 23 | 4 | 2 | 2 | 3 | 4 | 1 | .. | .. | 2 | .. | .. | 1 | 1 | 3 | 176 | 68 |
| | Females | 202 | 9 | .. | 3 | .. | .. | .. | .. | 1 | 1 | 2 | .. | .. | .. | .. | 2 | 134 | 59 |
| Epileptic | Totals | 306 | 38 | 3 | 7 | .. | .. | 8 | 6 | 3 | 3 | 3 | 1 | 1 | .. | 3 | .. | 201 | 67 |
| | Males | 194 | 36 | 3 | 6 | .. | .. | 7 | 6 | 3 | 3 | 3 | 1 | 1 | .. | 3 | .. | 117 | 41 |
| | Females | 112 | 2 | .. | 1 | .. | .. | 1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 84 | 26 |
| Partially deaf and dumb | Totals | 87 | 45 | 3 | .. | 2 | .. | 3 | 6 | 8 | 7 | 5 | 6 | 4 | .. | 1 | .. | 37 | 5 |
| | Males | 52 | 26 | 2 | .. | 1 | .. | 1 | 5 | 3 | 5 | 2 | 6 | 1 | .. | .. | .. | 25 | 1 |
| | Females | 35 | 19 | 1 | .. | 1 | .. | 2 | 1 | 5 | 2 | 3 | .. | 3 | .. | 1 | .. | 12 | 4 |
| Dumb | Totals | 48 | ... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 41 | 7 |
| | Males | 27 | ... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 22 | 5 |
| | Females | 21 | ... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 19 | 2 |
| Partially blind | Totals | 89 | 32 | 7 | 2 | 8 | .. | 2 | 2 | 2 | 3 | 2 | 1 | 1 | .. | 1 | 1 | 47 | 10 |
| | Males | 56 | 18 | 4 | .. | 4 | .. | .. | 2 | 2 | 2 | 1 | 1 | 1 | .. | 1 | .. | 30 | 8 |
| | Females | 33 | 14 | 3 | 2 | 4 | .. | 2 | .. | .. | 1 | 1 | .. | .. | .. | .. | 1 | 17 | 2 |

## TABLE XXXVI.

*Showing, for the State, by Totals and by Sex, the Nativity and Parent-nativity of the Idiotic, Epileptic, Partially Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan in 1881.*

| CLASSES. | SEX. | Total Number. | Nativity of Persons Afflicted.* | | | Nativity of Parents of Persons Afflicted.* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Mother Unknown. Father. | | Father Unknown. Mother. | | |
| | | | Native. | Foreign. | Unknown. | Native. | Foreign. | Foreign Father and Native Mother. | Foreign Mother and Native Father. | Native. | Foreign. | Native. | Foreign. | Both Unknown. |
| Idiotic | Totals | 469 | 369 | 68 | 32 | 161 | 126 | 18 | 12 | 4 | 2 | 7 | 1 | 138 |
| | Males | 267 | 205 | 41 | 21 | 84 | 67 | 13 | 7 | 3 | 2 | 5 | 1 | 85 |
| | Females | 202 | 164 | 27 | 11 | 77 | 59 | 5 | 5 | 1 | ---- | 2 | ---- | 53 |
| Epileptic | Totals | 306 | 248 | 44 | 14 | 138 | 66 | 8 | 5 | ---- | 5 | 2 | ---- | 82 |
| | Males | 194 | 157 | 28 | 9 | 84 | 39 | 5 | 5 | ---- | 4 | ---- | ---- | 57 |
| | Females | 112 | 91 | 16 | 5 | 54 | 27 | 3 | ---- | ---- | 1 | 2 | ---- | 25 |
| Partially deaf and dumb | Totals | 87 | 63 | 19 | 5 | 28 | 30 | 3 | 3 | 2 | 2 | 2 | ---- | 17 |
| | Males | 52 | 40 | 8 | 4 | 18 | 16 | 2 | 2 | 1 | ---- | 1 | ---- | 12 |
| | Females | 35 | 23 | 11 | 1 | 10 | 14 | 1 | 1 | 1 | 2 | 1 | ---- | 5 |
| Dumb | Totals | 48 | 31 | 14 | 3 | 16 | 22 | 3 | 2 | ---- | 1 | ---- | ---- | 4 |
| | Males | 27 | 17 | 7 | 3 | 9 | 11 | 1 | 1 | ---- | 1 | ---- | ---- | 4 |
| | Females | 21 | 14 | 7 | ---- | 7 | 11 | 2 | 1 | ---- | ---- | ---- | ---- | --- |
| Partially blind | Totals | 89 | 64 | 14 | 11 | 41 | 22 | 6 | 1 | 1 | 1 | ---- | 1 | 16 |
| | Males | 56 | 39 | 9 | 8 | 26 | 12 | 4 | 1 | ---- | ---- | ---- | 1 | 12 |
| | Females | 33 | 25 | 5 | 3 | 15 | 10 | 2 | ---- | 1 | 1 | ---- | ---- | 4 |

* "Native" includes only those born in the United States.

## TABLE XXXVII.

*Showing the Estates and Incomes of the Idiotic, Epileptic, Partially Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan in the year 1881.*

| CLASSES. | SEX. | Total Number. | Total Number who have Estates. | Value of Estates. | | | | | | No Estates. | Not Reported. | Total Number who have Incomes. | Value of Incomes. | | | | | | No Incomes. | Not Reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Under $500. | $500 to $1,000. | $1,000 to $2,000. | $2,000 to $5,000. | $5,000 and over. | Unknown. | | | | Under $100. | $100 to $200. | $200 to $500. | $500 to $1,000. | $1,000 and over. | Unknown. | | |
| Idiotic | Totals | 469 | 28 | 8 | 5 | 5 | 4 | 4 | 2 | 355 | 86 | 27 | 5 | 4 | 1 | 2 | .. | 15 | 359 | 83 |
| | Males | 267 | 14 | 3 | 2 | 3 | 2 | 3 | 1 | 204 | 49 | 17 | 1 | 3 | 1 | 1 | .. | 11 | 203 | 47 |
| | Females | 202 | 14 | 5 | 3 | 2 | 2 | 1 | 1 | 151 | 37 | 10 | 4 | 1 | .. | 1 | .. | 4 | 156 | 36 |
| Epileptic | Totals | 306 | 33 | 10 | 4 | 6 | 9 | 4 | .. | 189 | 84 | 50 | 4 | 4 | 13 | .. | .. | 29 | 177 | 79 |
| | Males | 194 | 27 | 8 | 3 | 4 | 8 | 4 | .. | 116 | 51 | 37 | 2 | 3 | 11 | .. | .. | 21 | 105 | 52 |
| | Females | 112 | 6 | 2 | 1 | 2 | 1 | .. | .. | 73 | 33 | 13 | 2 | 1 | 2 | .. | .. | 8 | 72 | 27 |
| Partially deaf and dumb | Totals | 87 | 17 | 6 | 3 | 5 | 2 | .. | 1 | 26 | 44 | 27 | 1 | 1 | 3 | 2 | 1 | 19 | 23 | 37 |
| | Males | 52 | 10 | 4 | 2 | 2 | 1 | .. | 1 | 16 | 26 | 19 | 1 | .. | 3 | .. | 1 | 14 | 13 | 20 |
| | Females | 35 | 7 | 2 | 1 | 3 | 1 | .. | .. | 10 | 18 | 8 | .. | 1 | .. | 2 | .. | 5 | 10 | 17 |
| Dumb | Totals | 48 | 1 | .. | 1 | .. | .. | .. | .. | 38 | 9 | 2 | 1 | .. | .. | .. | .. | 1 | 35 | 11 |
| | Males | 27 | 1 | .. | 1 | .. | .. | .. | .. | 20 | 6 | 1 | 1 | .. | .. | .. | .. | .. | 19 | 7 |
| | Females | 21 | .. | .. | .. | .. | .. | .. | .. | 18 | 3 | 1 | .. | .. | .. | .. | .. | 1 | 16 | 4 |
| Partially blind | Totals | 89 | 26 | 4 | 5 | 10 | 3 | 2 | 2 | 36 | 27 | 32 | 3 | 2 | 11 | 3 | .. | 13 | 31 | 26 |
| | Males | 56 | 17 | 3 | 4 | 5 | 2 | 2 | 1 | 25 | 14 | 21 | 2 | 1 | 9 | 2 | .. | 7 | 21 | 14 |
| | Females | 33 | 9 | 1 | 1 | 5 | 1 | .. | 1 | 11 | 13 | 11 | 1 | 1 | 2 | 1 | .. | 6 | 10 | 12 |

## TABLE XXXVIII.

*Estates and Incomes of the Relatives liable for the support of the Idiotic, Epileptic, Partially Deaf and Dumb, Dumb, and Partially Blind Persons in Michigan in the year 1881.*

| CLASSES. | SEX. | Total Number. | Number whose relatives have estates. | Value of Estates of Relatives Liable for the Support of such Persons. | | | | | | No. whose relatives have no estates. | No. who have relatives whose estates, if any, are not reported. | Total number whose relatives have incomes. | Value of Incomes of Relatives Liable for the Support of such Persons. | | | | | | No. whose relatives have no incomes. | No. who have relatives whose incomes, if any, are not reported. | No. who have no relatives liable for their support. | No. whose relatives liable for their support, if any, are not reported. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Under $500. | $500 to $1,000. | $1,000 to $2,000. | $2,000 to $5,000. | $5,000 and over. | Unknown. | | | | Under $100. | $100 to $200. | $200 to $500. | $500 to $1,000. | $1,000 and over. | Unknown. | | | | |
| Idiotic | Totals | 469 | 181 | 18 | 18 | 42 | 59 | 41 | 3 | 45 | 29 | 77 | 3 | 9 | 27 | 17 | 6 | 15 | 68 | 110 | 185 | 29 |
| | Males | 267 | 97 | 10 | 7 | 27 | 36 | 16 | 1 | 33 | 17 | 39 | 2 | 6 | 10 | 6 | 4 | 11 | 49 | 59 | 101 | 19 |
| | Females | 202 | 84 | 8 | 11 | 15 | 23 | 25 | 2 | 12 | 12 | 38 | 1 | 3 | 17 | 11 | 2 | 4 | 19 | 51 | 84 | 10 |
| Epileptic | Totals | 306 | 106 | 11 | 15 | 27 | 32 | 16 | 5 | 26 | 27 | 62 | 3 | 3 | 19 | 17 | 7 | 13 | 64 | 63 | 107 | 40 |
| | Males | 194 | 67 | 6 | 8 | 21 | 18 | 10 | 4 | 14 | 10 | 39 | 1 | .. | 13 | 10 | 6 | 9 | 19 | 33 | 68 | 35 |
| | Females | 112 | 39 | 5 | 7 | 6 | 14 | 6 | 1 | 12 | 17 | 23 | 2 | 3 | 6 | 7 | 1 | 4 | 15 | 30 | 39 | 5 |
| Part'lly deaf & dumb | Totals | 87 | 25 | 3 | 1 | 7 | 8 | 5 | 1 | 3 | 21 | 10 | 1 | 3 | 1 | .. | 3 | 2 | 5 | 34 | 38 | ... |
| | Males | 52 | 14 | 3 | .. | 3 | 3 | 4 | 1 | 1 | 12 | 5 | .. | 2 | 1 | .. | 1 | 1 | 3 | 19 | 25 | ... |
| | Females | 35 | 11 | .. | 1 | 4 | 5 | 1 | .. | 2 | 9 | 5 | 1 | 1 | .. | .. | 2 | 1 | 2 | 15 | 13 | ... |
| Dumb | Totals | 48 | 21 | 3 | 2 | 5 | 8 | 3 | .. | 5 | 6 | 10 | 1 | .. | 6 | .. | 1 | 2 | 8 | 14 | 12 | 4 |
| | Males | 27 | 13 | 1 | 2 | 4 | 4 | 2 | .. | 2 | 4 | 6 | .. | .. | 4 | .. | 1 | 1 | 7 | 6 | 7 | 1 |
| | Females | 21 | 8 | 2 | .. | 1 | 4 | 1 | .. | 3 | 2 | 4 | 1 | .. | 2 | .. | .. | 1 | 1 | 8 | 5 | 3 |
| Part'lly blind | Totals | 89 | 20 | 3 | 1 | 7 | 5 | 3 | 1 | 2 | 8 | 10 | .. | 2 | 3 | 2 | .. | 3 | 3 | 17 | 35 | 24 |
| | Males | 56 | 10 | 2 | 1 | 2 | 3 | 2 | .. | 1 | 3 | 4 | .. | 1 | 1 | 2 | .. | .. | 1 | 9 | 26 | 16 |
| | Females | 33 | 10 | 1 | .. | 5 | 2 | 1 | 1 | 1 | 5 | 6 | .. | 1 | 2 | .. | .. | 3 | 2 | 8 | 9 | 8 |

## TABLE XXXIX.

*Showing, for the Idiotic Persons in Michigan, the Assigned Causes of Idiocy, and, by Sex, the number Idiotic from each Cause.*

| CAUSES. | Males. | Females. | CAUSES. | Males. | Females. |
|---|---|---|---|---|---|
| Congenital | 141 | 96 | Sickness and fits | 1 | .... |
| Fright of mother | 2 | 1 | Sickness | 2 | 8 |
| Injury to mother | .... | 1 | Sickness in childhood | 1 | .... |
| Marked after drunken father | .... | 1 | Fever | 3 | 2 |
| Defective organization | 2 | 2 | Scarlet fever | 1 | 5 |
| Hereditary | 7 | 4 | Typhoid fever | 2 | 2 |
| Consanguinity of parents | 1 | .... | Measles | 1 | 1 |
| St. Vitus's dance,—afflicted from infancy,—parents were cousins | 3 | 1 | Whooping-cough | 1 | 1 |
| Teething | 2 | .... | Scrofula | .... | 1 |
| Fits in teething | .... | 1 | Medicine | .... | 2 |
| From childhood | 3 | 2 | Taking calomel | 1 | 1 |
| Inflammation of eyes when young | .... | 1 | Eating wild parsnips | 1 | .... |
| Masturbation | 2 | .... | Injury to spine | 2 | .... |
| Intemperance | 1 | .... | Injury to head | 3 | .... |
| Dropsy of the brain | 2 | .... | Fall | 4 | 3 |
| Inflammation of brain | 6 | 3 | Falling in childhood | 1 | 1 |
| Cerebro-spinal meningitis | .... | 1 | Falling into water when a child | 1 | .... |
| Spinal fever | 1 | 1 | Kick of a horse | 2 | .... |
| Spine disease | .... | 1 | Gored by a cow | 1 | .... |
| Rickets | 1 | 1 | Sun-stroke | 1 | .... |
| Weakness of nerves | .... | 2 | Abuse by parents | .... | 1 |
| Paralysis | .... | 3 | Mal-treatment | 1 | .... |
| Epilepsy | 12 | 12 | Loss of friends | .... | 1 |
| Fits | 20 | 17 | Religious excitement | 2 | .... |
| | | | Unassigned | 29 | 22 |
| Totals | | | | 267 | 202 |

## TABLE XL.

*Showing, for the Epileptic Persons in Michigan, the Assigned Causes of Malady, and, by Sex, the number Epileptic from each Cause.*

| CAUSES. | Males. | Females. | CAUSES. | Males. | Females. |
|---|---|---|---|---|---|
| Congenital | 16 | 8 | Whooping-cough | 1 | 1 |
| Fright of mother | ---- | 2 | Catarrh | ---- | 1 |
| Hereditary | 7 | 10 | Severe cold | ---- | 1 |
| Consanguinity of parents | 1 | ---- | Rheumatism | 1 | ---- |
| Predisposed | ---- | 1 | Scrofula | ---- | 1 |
| Injury at birth | 1 | ---- | Canker rash | 1 | ---- |
| From infancy | 4 | ---- | Effect of medicines | 1 | ---- |
| Spasms when teething | 1 | ---- | Injury,—run over by a wagon | 1 | ---- |
| Cutting teeth and neglect | ---- | 1 | Injury to back | 1 | ---- |
| Masturbation | 7 | 1 | Sun-stroke | 4 | 3 |
| Intemperance | 1 | ---- | Hurt on the head by a fall | 1 | ---- |
| Brain fever | ---- | 1 | Fall | 3 | 1 |
| Spinal meningitis | 1 | ---- | Blow from a crank | 1 | ---- |
| Spine disease | 1 | ---- | Burn | 1 | ---- |
| Spine disease and worms | 1 | ---- | Exposure to cold and wet | 2 | 1 |
| Spinal fever | 3 | 1 | Over-work and exposure | 1 | ---- |
| Paralysis | 1 | 3 | Over-work | 5 | ---- |
| Fits | 1 | 1 | Lifting | 1 | ---- |
| Excitement | 1 | ---- | Over-study | 1 | ---- |
| Fright | 2 | 1 | Over-heat | 1 | ---- |
| Climacteric | ---- | 1 | Stoppage of blood | 1 | ---- |
| Suppressed menses | ---- | 1 | Bad treatment | ---- | 1 |
| Female disease | ---- | 1 | Use of tobacco | ---- | 1 |
| Sickness | 7 | 1 | Contracted in army | 1 | ---- |
| Fever | 3 | 1 | Loss of arm | 1 | ---- |
| Scarlet fever | 1 | 2 | Trouble | ---- | 1 |
| Typhoid fever | 1 | ---- | Old age | 1 | ---- |
| Ague | 2 | 1 | Unassigned | 100 | 61 |
| Measles | ---- | 1 | | | |
| Totals | | | | 194 | 112 |

## TABLE XLI.

*Showing, for the Partially Deaf and Dumb Persons in Michigan, the Assigned Causes of Malady, and, by Sex, the number Partially Deaf and Dumb from each Cause.*

| CAUSES. | Males. | Females. | CAUSES. | Males. | Females. |
|---|---|---|---|---|---|
| Congenital | 9 | 4 | Spine disease | 1 | ---- |
| From infancy | ---- | 1 | Scarlet fever | 9 | 5 |
| Ear disease | ---- | 1 | Typhoid fever | 2 | 1 |
| Acute inflammation of internal ear | ---- | 1 | Inflammatory fever | 1 | ---- |
| Cold | 2 | 1 | Fever | 1 | ---- |
| Cold in the head | ---- | 1 | Canker rash | 1 | ---- |
| Brain fever | 4 | 3 | Scrofula | 1 | ---- |
| Congestion of brain | 2 | ---- | Mumps | ---- | 1 |
| Congestive fever | ---- | 1 | Catarrh | ---- | 1 |
| Congestive chill and paralysis | 1 | ---- | Sickness | 3 | 2 |
| Spotted fever | 2 | 1 | A hurt | 1 | ---- |
| Spinal fever | 5 | 7 | Fright | 1 | ---- |
| Spinal and scarlet fevers | 2 | ---- | Fall | 1 | ---- |
| | | | Unassigned | 3 | 4 |
| Totals | | | | 52 | 35 |

## TABLE XLII.

*Showing, for the Dumb Persons in Michigan, the Assigned Causes of Malady, and, by Sex, the number Dumb from each Cause.*

| CAUSES. | Males. | Females. | CAUSES. | Males. | Females. |
|---|---|---|---|---|---|
| Congenital | 13 | 12 | Epileptic fits | 1 | 1 |
| Insanity of mother | ---- | 1 | Fits | 1 | ---- |
| Injured at birth | ---- | 1 | Scarlet fever | 1 | ---- |
| From infancy | 2 | 1 | Nervous fever | 1 | ---- |
| Cholera infantum | ---- | 1 | Erysipelas | ---- | 1 |
| Tongue-tied | 1 | ---- | Sickness | 2 | 1 |
| Idiocy | 1 | ---- | Unassigned | 4 | 2 |
| Totals | | | | 27 | 21 |

## TABLE XLIII.

*Showing, for the Partially Blind Persons in Michigan, the Assigned Causes of Malady, and, by Sex, the number Partially Blind from each Cause.*

| CAUSES. | Males. | Females. | CAUSES. | Males. | Females. |
|---|---|---|---|---|---|
| Congenital | 6 | 6 | Small-pox | 2 | ---- |
| Hereditary sore eyes | ---- | 1 | Cancer | ---- | 1 |
| Hereditary cataract | 1 | ---- | Scrofula | 1 | 2 |
| Cataract | 5 | 3 | Scarlet fever | 3 | ---- |
| Cataract caused by sickness | ---- | 1 | Typhoid fever | 1 | ---- |
| Cataract caused by erysipelas | ---- | 1 | Rheumatic fever | 1 | ---- |
| Inflammation and cataract | 1 | ---- | Disease of eye and wrong treatment | ---- | 1 |
| Venereal disease | 1 | ---- | Taking chloroform | ---- | 1 |
| Inflammation and neuralgia | 1 | ---- | Vaccination | 1 | ---- |
| Inflammation | 9 | 5 | Accident | 1 | ---- |
| Granulation of eyelid and ulceration of cornea | ---- | 1 | Accidentally shot | 1 | ---- |
| Cold and granulation of eyelid | ---- | 1 | Struck by lightning | 1 | ---- |
| Cold contracted in army | 1 | ---- | Sun-stroke | 2 | ---- |
| Severe cold in infancy | 1 | ---- | Exposure to fire | ---- | 1 |
| Severe cold | 1 | ---- | Falling | 1 | ---- |
| Weak eyes and exposure to sun | 1 | ---- | Hurt by a stub | 1 | ---- |
| Nervousness | ---- | 1 | Hurt by a splint of wood | 1 | ---- |
| Small pupil | 1 | ---- | Cinder from locomotive | 1 | ---- |
| Sickness | 1 | ---- | Over-exertion | 1 | 1 |
| Measles | 1 | 1 | Unassigned | 5 | 5 |
| Whooping-cough | 1 | ---- | | | |
| Totals | | | | 56 | 33 |

## TABLE XLIV.

*Showing the Occupations of the Idiotic Persons in Michigan, and, by Sex, the number engaged in each occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Cabinet-makers' sons | 1 | .... | Laborers | 18 | 2 |
| Carpenters' sons | 1 | .... | Laborers' sons and daughters | 5 | 3 |
| Children | 18 | 15 | Lumbermen's sons | 1 | .... |
| Chorers | 5 | .... | Matrons | .... | 1 |
| Domestics | .... | 2 | Merchants' daughters | .... | 1 |
| Engineers' daughters | .... | 1 | Miners | 1 | .... |
| Errand boys | 2 | .... | No occupation | 102 | 98 |
| Farmers | 30 | 1 | Not reported | 41 | 37 |
| Farmers' sons and daughters | 34 | 22 | Supervisors' daughters | .... | 1 |
| Farmers' wives | .... | 3 | Servants | 1 | .... |
| Farm laborers | 5 | .... | Saloon keepers' sons | 1 | .... |
| Housekeepers | .... | 9 | Tailors' daughters | .... | 1 |
| House-workers | .... | 5 | Teachers | 1 | .... |
| Totals | | | | 267 | 202 |

## TABLE XLV.

*Showing the Occupations of the Epileptic Persons in Michigan, and, by Sex, the number engaged in each occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Attorneys | 1 | .... | Laborers in saw-mills | 1 | .... |
| Bar-tenders | 1 | .... | Lumber dealers | 1 | .... |
| Blacksmiths | 1 | .... | Merchants | 1 | .... |
| Brick-masons | 1 | .... | Merchants' clerks | 1 | .... |
| Carpenters | 1 | .... | Merchants' sons | 1 | .... |
| Carpenters' daughters | .... | 1 | Millers | 1 | .... |
| Carpet-weavers | .... | 1 | Miners | 1 | .... |
| Children | 10 | 5 | Ministers | 2 | .... |
| Chorers | 1 | .... | No occupation | 50 | 28 |
| Domestics | .... | 4 | Not reported | 16 | 14 |
| Farmers | 51 | 5 | Painters | 3 | .... |
| Farmers' wives | .... | 2 | Physicians' daughters | .... | 1 |
| Farmers' sons and daughters | 13 | 6 | Pupils | .... | 1 |
| Farm laborers | 8 | .... | Railroad engineers | 1 | .... |
| Gardeners | 1 | .... | Real estate dealers' daughters | .... | 1 |
| Housekeepers | .... | 30 | Sailors | 1 | .... |
| House-workers | .... | 11 | Slab-pilers | 1 | .... |
| Laborers | 22 | .... | Soldiers | 1 | .... |
| Laborers' daughters | .... | 1 | Tailors | 1 | 1 |
| Totals | | | | 194 | 112 |

## TABLE XLVI.

*Showing the Occupation of the Partially Deaf and Dumb Persons in Michigan, and, by Sex, the number engaged in each occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Children | 3 | 1 | No occupation | 5 | 1 |
| Dressmakers | .... | 1 | Not reported | 1 | 1 |
| Farmers and wives | 14 | 1 | Painters | 3 | .... |
| Farmers' sons and daughters | 3 | 2 | Printers | 1 | .... |
| Housekeepers | .... | 7 | Physicians' daughters | .... | 1 |
| House-workers | .... | 4 | Pupils | 17 | 14 |
| Laborers | 1 | 1 | Sawyers | 1 | .... |
| Laborers' sons and daughters | 1 | 1 | Teachers | 1 | .... |
| Loafers | 1 | .... | | | |
| Totals | | | | 52 | 35 |

## TABLE XLVII.

*Showing the Occupations of the Dumb Persons in Michigan, and, by Sex, the number engaged in each occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Children | 2 | 3 | House-workers | .... | 1 |
| Farmers | 4 | .... | Laborers | 1 | .... |
| Farmers' sons and daughters | 6 | 3 | Laborers' sons | 2 | .... |
| Farm laborers | 1 | .... | No occupation | 5 | 10 |
| Fishermens' sons and daughters | 1 | 1 | Not reported | 5 | 2 |
| Housekeepers | .... | 1 | | | |
| Totals | | | | 27 | 21 |

## TABLE XLVIII.

*Showing the Occupations of the Partially Blind Persons in Michigan, and, by Sex, the number engaged in each occupation.*

| OCCUPATIONS. | Males. | Females. | OCCUPATIONS. | Males. | Females. |
|---|---|---|---|---|---|
| Agents | 1 | .... | Laborers | 7 | .... |
| Blacksmiths' daughters | .... | 2 | Laborers' sons | 1 | .... |
| Carpenters and joiners | 2 | .... | Mechanics | 1 | .... |
| Carpenters' daughters | .... | 1 | Miners | 1 | .... |
| Children | 2 | .... | Miners' sons | 1 | .... |
| Chorers | 1 | .... | Music teachers | 1 | .... |
| Farmers | 16 | 1 | No occupation | 4 | 3 |
| Farmers' wives | .... | 4 | Not reported | 11 | 3 |
| Farmers' daughters | .... | 7 | Peddlers | 1 | .... |
| Farm laborers | 1 | .... | Peddlers and news dealers | 1 | .... |
| Housekeepers | .... | 8 | Physicians | 1 | .... |
| House-workers | .... | 2 | Produce merchants | 1 | .... |
| Hunters | 1 | .... | Wood-sawyers | 1 | .... |
| Knitters | .... | 2 | | | |
| Totals | | | | 56 | 33 |

## EXHIBIT A.

*Showing the Sex, Age, and Conjugal and Mental Condition of Persons reported as being afflicted with any of the maladies included in this Abstract, of whom the information seems to indicate that more than one in a family are afflicted, with the nature, duration, and cause of malady, and the township or city, and the county, from which each is reported.*

| Sex. | Age in Years. | Conjugal Condition. | Name and Degree of Malady. | Time in Years Afflicted. | Mental Condition. | Township or City from which Reported. | County from which Reported. | Assigned Cause of Malady. |
|---|---|---|---|---|---|---|---|---|
| Male | 8 | Single | Deaf and dumb | 7 | Intelligent | Casco | Allegan | Spinal fever. |
| Male | 58 | Married | Totally blind | 37 | Intelligent | Casco | Allegan | Inflammation. |
| Male | 27 | Married | Part. deaf & dumb | 24 | Intelligent | Otsego | Allegan | Scarlet fever and croup. |
| Female | 20 | Married | Part. deaf & dumb | 17 | Intelligent | Otsego | Allegan | Spotted fever. |
| Male | 36 | Married | Deaf and dumb | 35 | Intelligent | Otsego | Allegan | Catarrh. |
| Female | 32 | Married | Deaf and dumb | 32 | Intelligent | Otsego | Allegan | Congenital. |
| Female | 67 | Single | Deaf and dumb | 67 | Not sound | Assyria | Barry | Congenital. |
| Female | 54 | Single | Deaf and dumb | 44 | Not sound | Assyria | Barry | Unknown. |
| Female | 39 | Single | Deaf and dumb | 37 | Intelligent | Deep River | Bay | Inflammation of brain. |
| Female | 45 | Married | Deaf and dumb | 45 | Intelligent | Deep River | Bay | Congenital. |
| Male | 17 | Single | Epileptic | 17 | Idiotic | Homestead | Benzie | A fall. |
| Male | 10 | Single | Idiotic | 10 | Idiotic | Homestead | Benzie | A mark. |
| Male | 51 | Married | Deaf and dumb | 40 | Intelligent | Berrien | Berrien | Scarlet fever. |
| Female | 43 | Married | Deaf and dumb | 40 | Intelligent | Berrien | Berrien | Scarlet fever. |
| Male | 6 | Single | Deaf and dumb | 6 | Intelligent | Berrien | Berrien | Unknown. |
| Male | 5 | Single | Deaf and dumb | 5 | Intelligent | Berrien | Berrien | Unknown. |
| Male | 4 | Single | Deaf and dumb | 4 | Intelligent | Berrien | Berrien | Unknown. |
| Male | 50 | Married | Deaf and dumb | ..... | Intelligent | California | Branch | Sickness. |
| Female | 45 | Married | Deaf and dumb | 45 | Intelligent | California | Branch | Congenital. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Female. | 76 | Widowed | Blind | 40 | Intelligent | Union | Branch | Scrofula. |
| Female. | 50 | Single | Blind | 30 | Intelligent | Union | Branch | Inflammation. |
| Male | 26 | Single | Deaf and dumb | 26 | Intelligent | Albion | Calhoun | Congenital. |
| Female. | 20 | Single | Deaf and dumb | 20 | Intelligent | Albion | Calhoun | Congenital. |
| Male | 78 | Widowed | Blind | 20 | Intelligent | Le Roy | Calhoun | Old age. |
| Male | 47 | Married | Epileptic | 47 | Intelligent | Le Roy | Calhoun | Congenital. |
| Female. | 20 | Single | Deaf and dumb | 20 | Intelligent | Dowagiac City | Cass | Congenital. |
| Female. | 19 | Single | Deaf and dumb | 19 | Intelligent | Dowagiac City | Cass | Congenital. |
| Male | 26 | Single | Idiotic | 26 | Idiotic | Pokagon | Cass | Congenital. |
| Female. | 16 | Single | Idiotic | 16 | Idiotic | Pokagon | Cass | Congenital. |
| Male | 19 | Single | Idiotic | 19 | Idiotic | Detour | Chippewa | Congenital. |
| Female. | 60 | Married | Insane | Unk. | Intelligent | Detour | Chippewa | Unknown. |
| Male | 41 | Married | Deaf and dumb | 40 | Intelligent | Dallas | Clinton | Swelling under right ear. |
| Female. | 40 | Married | Deaf and dumb | 40 | Intelligent | Dallas | Clinton | Congenital. |
| Female. | 9 | Single | Deaf and dumb | 9 | Intelligent | Dallas | Clinton | Hereditary. |
| Female. | 6 | Single | Deaf and dumb | 6 | Intelligent | Dallas | Clinton | Hereditary. |
| Female. | 4 | Single | Deaf and dumb | 4 | Intelligent | Dallas | Clinton | Hereditary. |
| Female. | 2 | Single | Deaf and dumb | 2 | Intelligent | Dallas | Clinton | Hereditary. |
| Male | 29 | Married | Part. deaf & dumb | 17 | Intelligent | Dallas | Clinton | Brain fever. |
| Female. | 18 | Married | Deaf and dumb | 15 | Intelligent | Dallas | Clinton | Typhoid and brain fever. |
| Male | 40 | Married | Deaf and dumb | 40 | Intelligent | Chester | Eaton | Congenital. |
| Female. | 38 | Married | Deaf and dumb | 38 | Intelligent | Chester | Eaton | Congenital. |
| Male | 26 | Married | Deaf and dumb | 26 | Intelligent | Kalamo | Eaton | Congenital. |
| Female. | 25 | Married | Deaf and numb | 25 | Intelligent | Kalamo | Eaton | Congenital. |
| Male | 54 | Married | Deaf and dumb | 54 | Intelligent | Clayton | Genesee | Congenital. |
| Female. | 52 | Married | Deaf and dumb | 52 | Intelligent | Clayton | Genesee | Congenital. |
| Male | 45 | Married | Deaf and dumb | 45 | Intelligent | Clayton | Genesee | Congenital. |
| Female. | 35 | Married | Deaf and dumb | 35 | Intelligent | Clayton | Genesee | Congenital. |

EXHIBIT A.—CONTINUED.

| Sex. | Age in Years. | Conjugal Condition. | Name and Degree of Malady. | Time in Years Afflicted. | Mental Condition. | Township or City from which Reported. | County from which Reported. | Assigned Cause of Malady. |
|---|---|---|---|---|---|---|---|---|
| Male | 30 | Married | Deaf and dumb | 24 | Intelligent | Fenton | Genesee | Scarlet fever. |
| Female | 27 | Married | Deaf and dumb | 27 | Intelligent | Fenton | Genesee | Congenital. |
| Male | 31 | Married | Deaf and dumb | 31 | Intelligent | Flint City | Genesee | Congestion of brain. |
| Female | 26 | Married | Part. deaf & dumb | 20 | Intelligent | Flint City | Genesee | Congenital. |
| Female | 16 | Single | Idiotic | 16 | Idiotic | Genesee | Genesee | Congenital. |
| Male | 11 | Single | Idiotic | 11 | Idiotic | Genesee | Genesee | Congenital. |
| Male | 17 | Single | Deaf and dumb | 16 | Intelligent | Flint, 4th ward | Genesee | Measles. |
| Male | 13 | Single | Deaf and dumb | 10 | Intelligent | Flint, 4th ward | Genesee | Boils. |
| Female | 15 | Single | Part. deaf & dumb | 9 | Intelligent | Flint, 4th ward | Genesee | Spinal fever. |
| Female | 11 | Single | Deaf and dumb | 8 | Intelligent | Flint, 4th ward | Genesee | Spinal fever. |
| Male | 12 | Single | Deaf and dumb | 12 | Intelligent | Flint, 4th ward | Genesee | Congenital. |
| Male | 10 | Single | Deaf and dumb | 10 | Intelligent | Flint, 4th ward | Genesee | Congenital. |
| Male | 13 | Single | Deaf and dumb | 12 | Intelligent | Flint, 4th ward | Genesee | Spinal fever. |
| Male | 10 | Single | Deaf and dumb | 9 | Intelligent | Flint, 4th ward | Genesee | Spinal fever. |
| Male | 15 | Single | Deaf and dumb | 15 | Intelligent | Flint, 4th ward | Genesee | Congenital. |
| Female | 18 | Single | Deaf and dumb | 18 | Intelligent | Flint, 4th ward | Genesee | Congenital. |
| Male | 21 | Single | Deaf and dumb | 21 | Intelligent | Flint, 4th ward | Genesee | Congenital. |
| Male | 17 | Single | Deaf and dumb | 17 | Intelligent | Flint, 4th ward | Genesee | Congenital. |
| Male | 15 | Single | Deaf and dumb | 14 | Intelligent | Flint, 4th ward | Genesee | Measles. |
| Male | 16 | Single | Deaf and dumb | 14 | Intelligent | Flint, 4th ward | Genesee | Inflammation. |
| Female | 14 | Single | Deaf and dumb | 14 | Intelligent | Flint, 4th ward | Genesee | Congenital. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Female. | 27 | Single | Insane | 27 | Intelligent | Billings | Gladwin | Unknown. |
| Female. | 61 | Married | Insane | 1 | Intelligent | Billings | Gladwin | Enlargement of spleen. |
| Male | 13 | Single | Deaf and dumb | 13 | Intelligent | Camden | Hillsdale | Congenital. |
| Female. | 22 | Single | Deaf and dumb | 22 | Intelligent | Camden | Hillsdale | Congenital. |
| Female. | 27 | Single | Epileptic | 21 | Weak | Hillsdale City | Hillsdale | Not reported. |
| Male | 21 | Single | Epileptic | 17 | Weak | Hillsdale City | Hillsdale | Not reported. |
| Female. | 38 | Single | Deaf and dumb | 38 | Intelligent | Pittsford | Hillsdale | Congenital. |
| Female. | 40 | Single | Deaf and dumb | 40 | Intelligent | Pittsford | Hillsdale | Congenital. |
| Female. | 7 | Single | Deaf and dumb | *a* | Not reported | Huron | Huron | Unknown. |
| Female. | 3 | Single | Deaf and dumb | *a* | Not reported | Huron | Huron | Not reported. |
| Male | 6 | Single | Epileptic | 6 | Imbecile | Lake | Huron | Hereditary. |
| Male | 11 | Single | Idiotic | 11 | Idiotic | Lake | Huron | Hereditary. |
| Male | 20 | Single | Deaf and dumb | ..... | Intelligent | Paris | Huron | Unknown. |
| Female. | 18 | Single | Deaf and dumb | 18 | Intelligent | Paris | Huron | Congenital. |
| Male | 10 | Single | Deaf and dumb | 10 | Intelligent | Paris | Huron | Congenital. |
| Male | 8 | Single | Deaf and dumb | 8 | Intelligent | Paris | Huron | Congenital. |
| Female | 59 | Married | Epilepsy | 42 | Intelligent | LeRoy | Ingham | Exposure. |
| Female. | 23 | Single | Epilepsy | 3 | Intelligent | LeRoy | Ingham | Hereditary. |
| Female. | 19 | Single | Partially blind | 7 | Intelligent | Lansing | Ingham | Scrofula. |
| Male | 23 | Single | Partially blind | 21 | Intelligent | Lansing | Ingham | Inflammation. |
| Female. | 23 | Single | Blind | 23 | Intelligent | Lansing | Ingham | Spasms of crying in infancy. |
| Male | 23 | Single | Blind | 22 | Intelligent | Lansing | Ingham | Inflammation. |
| Male | 19 | Single | Blind | 13 | Intelligent | Lansing | Ingham | Unk'n—parents were relatives. |
| Male | 17 | Single | Blind | 11 | Intelligent | Lansing | Ingham | Unk'n—parents were relatives. |
| Male | 16 | Single | Partially blind | 16 | Intelligent | Lansing | Ingham | Congenital. |
| Male | 15 | Single | Partially blind | 15 | Intelligent | Lansing | Ingham | Congenital. |

*a* From Childhood.

EXHIBIT A.—CONTINUED.

| Sex. | Age in Years. | Conjugal Condition. | Name and Degree of Malady. | Time in Years Afflicted. | Mental Condition. | Township or City from which Reported. | County from which Reported. | Assigned Cause of Malady. |
|---|---|---|---|---|---|---|---|---|
| Male | 35 | Married | Deaf and dumb | 32 | Intelligent | Keene | Ionia | Scarlet fever. |
| Female | 32 | Married | P'art. deaf & dumb | 29 | Intelligent | Keene | Ionia | Unknown. |
| Male | 41 | Single | Deaf and dumb | ..... | Intelligent | Sebewa | Ionia | Not reported. |
| Male | 42 | Single | Deaf and dumb | ..... | Intelligent | Sebewa | Ionia | Not reported. |
| Male | 37 | Married | Deaf and dumb | 34 | Intelligent | Jackson, 7th ward | Jackson | Brain fever. |
| Female | 46 | Married | Deaf and dumb | 46 | Intelligent | Jackson, 7th ward | Jackson | Congenital. |
| Female | 48 | Married | Deaf and dumb | 48 | Intelligent | Jackson, 7th ward | Jackson | Congenital. |
| Male | 45 | Married | Deaf and dumb | 40 | Intelligent | Jackson, 7th ward | Jackson | Scarlet fever. |
| Male | 29 | Married | Deaf and dumb | 29 | Intelligent | Springport | Jackson | Congenital. |
| Female | 23 | Married | Deaf and dumb | 17 | Intelligent | Springport | Jackson | Sickness. |
| Male | 69 | Married | Deaf and dumb | 67 | Intelligent | Comstock | Kalamazoo | Scarlet fever. |
| Female | 69 | Married | Part. deaf & dumb | 68 | Intelligent | Comstock | Kalamazoo | Congenital. |
| Female | 55 | Widowed | Mildly insane | Unk. | Intelligent | Comstock | Kalamazoo | Spiritualism. |
| Female | 20 | Single | Deaf and dumb | 18 | Intelligent | Comstock | Kalamazoo | Scarlet fever. |
| Male | 11 | Single | Idiotic | 11 | Idiotic | Comstock | Kalamazoo | Congenital. |
| Female | 18 | Single | Idiotic | 18 | Idiotic | Comstock | Kalamazoo | Congenital. |
| Female | 45 | Married | Insane | 14 | Unsettled | Kalamazoo | Kalamazoo | Childbirth. |
| Male | 50 | Married | Insane | 5 | Improving | Kalamazoo | Kalamazoo | Hereditary. |
| Male | 17 | Single | Idiotic | 17 | Idiotic | Boone | Kent | Congenital. |
| Male | 14 | Single | Idiotic | 14 | Idiotic | Boone | Kent | Congenital. |
| Male | 40 | Married | Deaf and dumb | 40 | Intelligent | Byron | Kent | Congenital. |
| Female | 36 | Married | Deaf and dumb | 33 | Intelligent | Byron | Kent | Brain fever. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Male | 27 | Single | Idiotic | 17 | Idiotic | Caledonia | Kent | Fits. |
| Male | 22 | Single | Idiotic | 22 | Idiotic | Caledonia | Kent | Unknown. |
| Male | 37 | Married | Deaf and dumb | 37 | Intelligent | Cannon | Kent | Congenital. |
| Female. | 33 | Married | Deaf and dumb | 31 | Intelligent | Cannon | Kent | Typhoid fever. |
| Male | 31 | Married | Deaf and dumb | 26 | Intelligent | G'd Rapids,4th ward | Kent | Measles. |
| Female. | 28 | Married | Deaf and dumb | 25 | Intelligent | G'd Rapids,4th ward | Kent | Scarlet fever. |
| Female. | 57 | Married | Insane | 12 | Idiotic | Paris | Kent | Unknown. |
| Female. | 18 | Single | Idiotic | 18 | Idiotic | Paris | Kent | Hereditary. |
| Female. | 60 | Single | Idiotic | 60 | Idiotic | Paris | Kent | Hereditary. |
| Female. | 58 | Single | Idiotic | 58 | Idiotic | Paris | Kent | Hereditary. |
| Male | 48 | Single | Insane | 20 | Idiotic | Paris | Kent | Hereditary. |
| Male | 32 | Married | Insane | 5 | Idiotic | Paris | Kent | Hereditary. |
| Male | 23 | Single | Deaf and dumb | 23 | Idiotic | Spencer | Kent | Congenital. |
| Female. | 31 | Single | Deaf and dumb | 31 | Idiotic | Spencer | Kent | Congenital. |
| Female. | 7 | Single | Blind | 7 | Intelligent | Tyrone | Kent | Congenital. |
| Female. | 1 | Single | Blind | 1 | Intelligent | Tyrone | Kent | Congenital. |
| Female. | 46 | Married | Deaf and dumb | 46 | Intelligent | Tyrone | Kent | Congenital. |
| Male | 42 | Married | Deaf and dumb | 42 | Intelligent | Tyrone | Kent | Congenital. |
| Male | 50 | Married | Part. deaf & dumb | 44 | Intelligent | Tyrone | Kent | Brain fever. |
| Female. | 38 | Married | Part. deaf & dumb | 38 | Intelligent | Tyrone | Kent | Congenital. |
| Female. | 13 | Single | Deaf and dumb | 13 | Intelligent | Allouez | Keweenaw | Hereditary. |
| Male | 11 | Single | Deaf and dumb | 11 | Intelligent | Allouez | Keweenaw | Hereditary. |
| Male | 32 | Married | Deaf and dumb | 32 | Intelligent | Attica | Lapeer | Congenital. |
| Female. | 29 | Married | Deaf and dumb | 25 | Intelligent | Attica | Lapeer | Fever. |
| Male | 47 | Single | Idiotic | 47 | Idiotic | Attica | Lapeer | Congenital. |
| Female. | 45 | Single | Idiotic | 45 | Idiotic | Attica | Lapeer | Congenital. |
| Female. | 25 | Single | Idiotic | 25 | Idiotic | Attica | Lapeer | Congenital. |

EXHIBIT A.—CONTINUED.

| Sex. | Age in Years. | Conjugal Condition. | Name and Degree of Malady. | Time in Years Afflicted. | Mental Condition. | Township or City from which Reported. | County from which Reported. | Assigned Cause of Malady. |
|---|---|---|---|---|---|---|---|---|
| Male | 24 | Single | Idiotic | 4 | Idiotic | Burnside | Lapeer | Self-abuse. |
| Male | 30 | Single | Idiotic | 12 | Idiotic | Burnside | Lapeer | Self-abuse. |
| Male | 27 | Single | Deaf and dumb | 27 | Intelligent | Metamora | Lapeer | Congenital. |
| Female | 19 | Single | Deaf and dumb | 19 | Fair | Metamora | Lapeer | Congenital. |
| Male | 96 | Married | Totally blind | 12 | Intelligent | Leland | Leelanaw | Unknown. |
| Male | 40 | Widowed | Partially blind | ½ | Intelligent | Leland | Leelanaw | Unknown. |
| Male | 22 | Single | Idiotic | 15 | Idiotic | Clinton | Lenawee | Epilepsy. |
| Male | .... | ..... | Partially blind | ..... | ..... | Clinton | Lenawee | Cataract. |
| Female | 49 | Single | Idiotic | 49 | Idiotic | Macon | Lenawee | Congenital. |
| Male | 33 | Single | Idiotic | 33 | Idiotic | Macon | Lenawee | Congenital. |
| Male | 28 | Single | Idiotic | 28 | Idiotic | Macon | Lenawee | Congenital. |
| Female | 68 | Widowed | Blind | 2 | Intelligent | Macon | Lenawee | Cataract. |
| Female | 47 | Single | Deaf and dumb | 42 | Intelligent | Seneca | Lenawee | Scarlet fever. |
| Female | 41 | Single | Deaf and dumb | 40 | Intelligent | Seneca | Lenawee | Scarlet fever. |
| Male | 54 | Married | Deaf and dumb | 51 | Intelligent | Tecumseh | Lenawee | Run over by stage and head injured. |
| Female | 40 | Married | Deaf and dumb | 38 | Intelligent | Tecumseh | Lenawee | Scarlet fever. |
| Female | 49 | Married | Mildly insane | 15 | Not reported | Conway | Livingston | Rush of blood to the head. |
| Female | 15 | Single | Dumb | 15 | Not reported | Conway | Livingston | Mother's insanity. |
| Male | 33 | Single | Deaf and dumb | 30 | Intelligent | Tyrone | Livingston | Sickness. |
| Female | 34 | Married | Deaf and dumb | 33 | Intelligent | Tyrone | Livingston | Sickness. |
| Male | 16 | Single | Idiotic | 16 | Idiotic | Armada | Macomb | Congenital. |
| Male | 29 | Single | Deaf and dumb | 29 | Intelligent | Armada | Macomb | Congenital. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Female. | 34 | Single | Idiotic | 3 | Idiotic | Harrison | Macomb | Congenital. |
| Female. | 19 | Single | Mildly insane | 2 | Poor | Harrison | Macomb | Menstrual derangement, and fits. |
| Female. | 68 | Married | Blind | 35 | Intelligent | Ray | Macomb | Failure of optic nerve. |
| Female. | 35 | Single | Blind | 15 | Intelligent | Ray | Macomb | Failure of optic nerve. |
| Male | 18 | Single | Deaf and dumb | 17 | Intelligent | Sterling | Macomb | Unknown. |
| Male | 15 | Single | Deaf and dumb | 14 | Intelligent | Sterling | Macomb | Unknown. |
| Female. | 5 | Single | Deaf and dumb | 4 | Intelligent | Sterling | Macomb | Unknown. |
| Male | 30 | Married | Partially blind | 29 | Intelligent | Arcadia | Manistee | Hurt by a stick. |
| Female. | 58 | Married | Partially blind | 58 | Intelligent | Arcadia | Manistee | Congenital. |
| Male | 15 | Single | Epileptic | 15 | Imbecile | Negaunee | Marquette | Hereditary. |
| Male | 9 | Single | Deaf and dumb | 9 | Intelligent | Negaunee | Marquette | Congenital. |
| Male | 6 | Single | Deaf and dumb | 6 | Intelligent | Amber | Mason | Congenital. |
| Female. | 8 | Single | Deaf and dumb | 8 | Intelligent | Amber | Mason | Congenital. |
| Male | 23 | Single | Epileptic | 8 | Weak | Austin | Mecosta | Over-exertion. |
| Male | 12 | Single | Epileptic | 3 | Weak | Austin | Mecosta | Sickness. |
| Male | 40 | Single | Idiotic | 40 | Idiotic | London | Monroe | Congenital. |
| Female. | 36 | Single | Idiotic | 36 | Idiotic | London | Monroe | Congenital. |
| Female. | 33 | Single | Epileptic | 33 | Idiotic | Monroe | Monroe | Congenital. |
| Female. | 27 | Single | Idiotic | 27 | Idiotic | Monroe | Monroe | Congenital. |
| Male | 34 | Single | Mildly insane | 10 | Intelligent | Whiteford | Monroe | Typhoid fever. |
| Male | 40 | Single | Totally blind | 18 | Intelligent | Whiteford | Monroe | Ophthalmia. |
| Male | 27 | Married | Blind | 16 | Intelligent | Richland | Montcalm | Gunshot. |
| Female. | 29 | Married | Blind | 15 | Intelligent | Richland | Montcalm | Inflammation. |
| Female. | 31 | Widowed | Epileptic | 16 | Intelligent | Richland | Montcalm | Not reported. |
| Male | 46 | Married | Deaf and dumb | 38 | Intelligent | Moorland | Muskegon | Scarlet fever. |
| Female. | 35 | Married | Deaf and dumb | 11 | Intelligent | Moorland | Muskegon | Fever. |
| Male | 40 | Married | Deaf and dumb | 35 | Intelligent | Independence | Oakland | Scarlet fever. |
| Female. | 31 | Married | Deaf and dumb | 30 | Intelligent | Independence | Oakland | Whooping-cough. |

EXHIBIT A.—CONTINUED.

| Sex. | Age in Years. | Conjugal Condition. | Name and Degree of Malady. | Time in Years Afflicted. | Mental Condition. | Township or City from which Reported. | County from which Reported. | Assigned Cause of Malady. |
|---|---|---|---|---|---|---|---|---|
| Female. | 25 | Single | Deaf and dumb | 25 | Intelligent | Milford | Oakland | Congenital. |
| Female. | 21 | Single | Deaf and dumb | 21 | Intelligent | Milford | Oakland | Congenital. |
| Female. | 56 | Married | Totally blind | 20 | Intelligent | Royal Oak | Oakland | Scrofula. |
| Female. | 18 | Single | Partially blind | 18 | Intelligent | Royal Oak | Oakland | Hereditary sore eyes. |
| Male | 28 | Single | Deaf and dumb | 28 | Intelligent | Allendale | Ottawa | Congenital. |
| Female. | 26 | Single | Deaf and dumb | 26 | Intelligent | Allendale | Ottawa | Congenital. |
| Male | 36 | Married | Partially blind | 36 | Intelligent | Grand Haven | Ottawa | Congenital. |
| Female. | 43 | Married | Totally blind | 39 | Intelligent | Grand Haven | Ottawa | Accident. |
| Male | 41 | Married | Partially blind | 20 | Intelligent | Grand Haven | Ottawa | Inflammation. |
| Female. | 33 | Married | Totally blind | 36 | Intelligent | Grand Haven | Ottawa | A fall, breaking the nerve of the eye. |
| Male | 81 | Married | Blind | 13 | Intelligent | Grand Haven | Ottawa | Erysipelas. |
| Female. | 52 | Married | Idiotic | 21 | Idiotic | Holland City | Ottawa | Fits. |
| Female. | 18 | Single | Epileptic | 2 | Poor | Holland City | Ottawa | Hereditary. |
| Male | 29 | Single | Idiotic | 29 | Idiotic | Holland City | Ottawa | Congenital. |
| Male | 29 | Single | Idiotic | 29 | Idiotic | Holland City | Ottawa | Congenital. |
| Male | 58 | Married | Insane | 22 | "Bad" | Wright | Ottawa | Hereditary. |
| Female. | 64 | Divorced | Insane | 30 | "Bad" | Wright | Ottawa | Hereditary. |
| Female. | 52 | Married | Blind | 3 | Intelligent | Birch Run | Saginaw | Hereditary. |
| Male | 14 | Single | Blind | 3 | Intelligent | Birch Run | Saginaw | Hereditary. |
| Male | 68 | Single | Deaf and dumb | 65 | Intelligent | Bridgeport | Saginaw | Typhoid fever. |
| Female. | 50 | Married | Deaf and dumb | 50 | Intelligent | Bridgeport | Saginaw | Disease in ears. |
| Female. | 19 | Single | Blind | 16 | Intelligent | Marlette | Sanilac | Inflammation. |
| Female. | 16 | Single | Blind | 16 | Intelligent | Marlette | Sanilac | Congenital. |